

Troubleshooting

General SSD FAQs

[My new SSD is not being seen by the BIOS in my 2008 or older computer. My older SATA drive is seen in the same port. Why?](#)

Our SATA III (6Gbit/s) SSDs are tested to be backwards compatible to SATA II (3Gbit/s). They are not designed or tested to be backwards compatible with SATA I ports (1.5Gbit/s). Most systems made before 2008 used SATA I ports. Our SSDs will likely not work in these systems.

FAQ: KSD-022714-LSI-03

[What is S.M.A.R.T. and do the SSDNow drives support it?](#)

Self-Monitoring, Analysis, and Reporting Technology (S.M.A.R.T.) is a built-in monitoring capability in hard drives and SSDs. It can allow users to monitor the health of a device. It does this through monitoring software designed specifically for the S.M.A.R.T. feature. All of our SSDNow drives support S.M.A.R.T.

FAQ: KSD-011411-GEN-10

[Will the SSD experience a performance decrease? If so, is there a way to reset the drive to a factory default?](#)

Performance decrease has been reported on some of the SSDNow drives. If you have an older SSD drive that does not have effective Garbage Collection, SSD drive performance will drop over time. This is due to the way the system overwrites data that has been flagged for deletion.

Try using the Secure Erase tool like HDDEraser to wipe the drive and restore it to original condition.

FAQ: KSD-011411-GEN-12

[When I connect my SSD as a secondary drive, it is seen as new hardware but I cannot see it as a usable drive. How can I resolve this?](#)

Open the control panel, open administrative tools and then open computer management. Click on Disk Management and see if the SSD drive is seen in the right window pane. If it is, right click on where it is labeled as disk 1, disk 2, etc and select "Initialize disk" (this may come up automatically when you go to Disk Management).

In XP, right click on the area to the right of that and choose "New Partition". Then choose "Primary Partition" in the partition wizard. Continue with the wizard by choosing the size, drive letter and formatting of the partition.

In Windows Vista and 7, right click on the area to the right of the disk label and choose "New Simple Volume". Continue with the wizard by choosing the size, drive letter and formatting of the partition.

In MacOS, a "disk insertion" window will appear. Click on the "initialize" button. This will take you to the disk utility. Select the Kingston drive from the list of drives on the left side of the Window. From the actions available, choose partition. For the "Volume Scheme", choose "1 partition". For the format, choose MacOS extended for a permanent drive. Choose ExFAT for an external drive (available on MacOS 10.6.6 and above). Click Apply. A warning windows will appear stating you will erase all data from the drive. Click on the partition button at the bottom.

FAQ: KSD-060314-GEN-14

[Is my data safe when I send my SSD back to Kingston for warranty replacement/repair?](#)

Kingston realizes the importance of keeping our customers' personal data and information confidential and secure. Kingston takes measures to ensure the security of all of our customers' personal information when a Solid State Drive (SSD) is returned to our RMA facility for warranty replacement or repair. When an SSD reaches our repair center, it will undergo a thorough testing process. During the first phase of testing, an ATA Secure Erase is performed on the SSD which erases all data and information. ATA Secure Erase is federally-approved by the National Institute of Standards and Technology (NIST 800-88) for legal sanitization of confidential user data. If the SSD is not in a functional state and not capable of undergoing an ATA Secure Erase, the SSD is dismantled and the NAND Flash Memory is destroyed.

FAQ: KSD-022411-GEN-15

[Can I use two or more SSD drives in a RAID?](#)

Any of our SSDs can be used in RAID. But due to endurance specifications, only certain part numbers should be used in RAID. For servers, please contact Kingston to determine the best Kingston SSD to use for your workload.

FAQ: KSD-052511-GEN-17

OS/Compatibility FAQs

[How do I verify the TRIM Command is enabled in Windows 7?](#)

First, open an Elevated Command Prompt window.

To open an Elevated Command Prompt window: Click on Start Orb > Type "CMD.exe" in Search box > Right click on "CMD" and select "Run as Administrator" (If you receive a prompt confirmation, click YES)

To verify the TRIM command is enabled, type the following and press enter in the Elevated command:

```
fsutil behavior query disabledeletenotify
```

The results will be as follows: DisableDeleteNotify = 1 (Windows TRIM commands are disabled) DisableDeleteNotify = 0 (Windows TRIM commands are enabled)

To enable the TRIM command, type the following and press enter in the Elevated command:

```
fsutil behavior set disabledeletenotify 0
```

To disable the TRIM command, type the following and press enter in the Elevated command:

```
fsutil behavior set disabledeletenotify 1
```

FAQ: KSD-072211-GEN-18

[What is TRIM and Garbage Collection? How are they related? Will TRIM work in XP, Vista or Linux?](#)

Over time, most of the storage locations on an SSD get written to. When they get written to again, they need to be conditioned in order to accept new data. This can cause a delay and is seen as a reduction in drive performance. Garbage collection is a function built into a SSD that reconditions empty storage locations so when new data is written to the drive, there are locations on the SSD ready to accept data.

Although Garbage Collection function is built into most SSD drives, some drives do a better job at it than others. TRIM resolves this issue by letting the operating system tell the drive when to perform this function. At this time, only Windows 7, Server 2008, MacOS 10.7 and newer versions of Linux use TRIM. Also, there are no RAID configurations that support TRIM no matter what operating system is used. All of Kingston's MLC based SSDNow drives are TRIM compatible. Some of our first generation SSDNow drives are not TRIM compatible.

FAQ: KSD-011411-GEN-13

[Should I defragment the SSDNow drive to maintain optimal performance?](#)

SSDs do not require defragmentation. Since there are no physical disks, there is no need to organize the data in order to reduce seek time. Therefore defragmenting an SSD is not effective. Also, defragmenting an SSD can put undue wear on specific areas of the drive. SSDs are designed to write data as evenly as possible over the entire drive to reduce undue wear to any one location. Nonetheless defragmenting your SSD drive a couple of times will not harm it. However if it is done continuously over a long period, it may reduce the life of the drive.

FAQ: KSD-011411-GEN-03

[Why didn't my primary HDD transfer rate score in the Windows Experience Index \(WEI\) go up after installing the new SSDNow drive?](#)

The Windows Experience Index (WEI) merely measures the relative capability of components. The WEI only runs for a short time and does not measure the interactions of components under a software load, but rather characteristics of your hardware.

Thus the WEI does not measure performance of a system, but merely the relative hardware capabilities when running Windows 7. An article about the WEI can be found here: <http://blogs.msdn.com/b/e7/archive/2009/01/19/engineering-the-windows-7-windows-experience-index.aspx>

In Vista, the WEI scores ranged from 1.0 to 5.9. In Windows 7, the range has been extended upward to 7.9.

FAQ: KSD-011411-GEN-08

[When I try to install Windows 7 from my installation disk, it will not detect the new SSD. But the drive is seen in the BIOS. How do I resolve this?](#)

When the SSD is recognized in the BIOS, but Windows 7 installation does not detect the drive, follow these steps:

Disconnect any other hard drives or SSDs. Boot the Windows 7 installation disk. Choose repair, then advanced, then command prompt. Type: "diskpart" without quotes and press Enter. You will see a prompt labeled "diskpart". Type the following commands and press enter after each one.

```
Diskpart > Select Disk 0
Diskpart > Clean
Diskpart > Create Partition Primary Align=1024
Diskpart > Format Quick FS=NTFS
Diskpart > List Partition
Diskpart > Active
Diskpart > Exit
```

Then reboot the computer to the Windows 7 installation disk.

FAQ: KSD-100214-GEN-20

[When performing a fresh installation or MacOS High Sierra on my new SSD, it states that the drive is not detected. It works fine if it is an upgrade installation. How do I resolve this?](#)

During the OS installation, go to UTILITIES / TERMINAL

In terminal type:

diskutil list

Then press RETURN. Scroll up to top and verify the Kingston SSD disk (i.e. disk0, disk1, etc).

Then type:

diskutil mountDISK disk0 (or whichever ddisk is the Kingston SSD).

Then press RETURN. It should show "mounted successfully".

Then type:

diskutil eraseDISK apfs YOURDRIVENAME disk0 (or whichever disk is the Kingston SSD)

**Warning – This step (eraseDISK command) will delete all data on the target drive.
Confirm that you have selected the drive you wish to delete and then continue.**

Then press RETURN. It should show "successful". Then exit terminal and proceed with the normal installation of the OS.

FAQ: KSD-092917-GEN-21