RevoDrive 350

User Guide

OCZ STORAGE SOLUTIONS

A Toshiba Group Company

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Installation Technical Support

OCZ products include free technical support for direct, expert advice.

For installation technical support, you can contact us by:
Visiting http://ocz.com/consumer/support
Writing to OCZ Storage Solutions, 6373 San Ignacio Avenue, San Jose, CA 95119 USA.

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Welcome!

The OCZ RevoDrive 350 SSD provides an exceptional SSD experience. The OCZ RevoDrive 350 is designed with power users and multimedia designers in mind, and gives enthusiasts the cutting-edge storage they crave. With the RevoDrive 350, OCZ is offering unprecedented performance. The OCZ Virtualized Controller Architecture (VCA) provides features such as TRIM support and SMART data monitoring, something previously unheard of with PCIe solutions. In addition the RevoDrive 350 SuperScale storage accelerator enables scalable SSD performance and significantly reduces the host CPU burden inherent in competing PCIe storage offerings.

Your operating system may permit you to use the RevoDrive 350 as a boot device or as a storage device. This guide contains instructions for both uses. The instructions assume that you are an experienced IT user and that you have access to the full user information for your system.

At OCZ we have one primary goal, and that is to ensure that every customer is 100% satisfied. If you have any questions during or after the installation process, please contact our industry-leading technical support team using the details inside the front cover of this guide.

SSD handling precautions

- Store the SSD in the supplied anti-static bag until it is ready for installation
- Electrostatic Discharge (ESD) can permanently damage the RevoDrive 350: ensure that you are properly grounded before handling the RevoDrive 350
- do not tamper with the card; doing so voids your warranty
- keep the drive away from direct sunlight, moisture, and extreme temperatures

Supported operating systems

RevoDrive 350 supports:

- Microsoft® Windows® 7, 8 and 8.1
- Linux:
  - Fedora 18 - 20
  - Mint 13 - 17
  - Ubuntu 10.04, 12.04, 12.10, 13.04, 13.10, 14.04

See ocz.com for any updated operating systems support.

Setting up the RevoDrive 350 in Windows

In Windows, you can do the following:

- Installation as a boot device in Windows
- Installation as a storage device in Windows

Before you start, ensure that you have the necessary driver; see Managing the Windows driver below.

Managing the Windows driver

To use the RevoDrive 350 correctly you need the RevoDrive 350 driver. The driver is supplied on CD when you purchase the RevoDrive 350, or to obtain the latest version of the RevoDrive 350 driver:

1 Go to ocz.com/consumer/download/drivers.

2 Select RevoDrive 350 from the list of products.

3 Find the operating system that is running on your system and download the appropriate driver.

4 Unzip the required driver onto a CD or a USB flash drive.

Install or update the driver

When installing the RevoDrive 350 as a boot device, you can install the driver as part of the setting-up process or you can install it manually as described below.
When installing the RevoDrive 350 as a storage device, the driver is automatically installed as part of the setting-up process if your computer is connected to the internet. Otherwise you can install it manually as described below.

1 Switch on and start up the computer.

2 Insert the CD or USB flash drive with the driver on; see above.

3 Navigate to the driver folder and double-click **setup.exe**. The OCZ driver setup wizard starts.

4 Click **Next** and follow the instructions to accept the End User License Agreement and install the driver.

Reinstall or remove the driver

You can reinstall or remove the driver when required. To do so:

1 Follow the steps above to download the driver to a CD or USB flash drive.

2 Navigate to the driver folder and double-click **setup.exe**. The OCZ driver setup wizard starts.

3 Click **Next**.
To reinstall the driver, click **Repair**.
To remove the driver, click **Remove**.

Installation as a boot device in Windows

To set up the RevoDrive 350 as a boot device in Windows:

1 Install the hardware.

2 Install Windows and the driver on the RevoDrive 350.

3 Set the RevoDrive 350 as a boot device.

The following instructions are a general guideline for installation in Windows 7; it is assumed that you have access to the system user manual for full instructions. Installing in other Microsoft operating systems is similar; see your system user manual.

Install the hardware

For optimal performance, we recommend that you install the RevoDrive 350 in a PCIe Gen2 slot.

1 Switch off your computer and disconnect it from the power supply.

2 Remove the case and locate an available PCIe slot. Carefully seat the drive into the slot.

3 Make certain that the drive board seats firmly into the slot. Screw the top of the board bracket into the system to ensure it remains in place.

4 Re-attach the computer case and connect it to the power supply.

Install Windows and the driver on the RevoDrive 350

1 Set the boot order in the system BIOS to boot from the Windows installation CD in the CD drive. For detailed instructions on how to access the BIOS and modify its settings, see the system user manual.

2 Boot from the CD and follow the onscreen Windows installation instructions.

3 On the **Where do you want to install Windows?** window, if the RevoDrive 350 is listed, select it and click **Next**.
If the RevoDrive 350 is not listed, install the driver from Managing the Driver on page 1:
   - click **Load Driver**
   - navigate to the driver file on the CD or memory stick
   - double-click the driver file

   Once the driver is loaded, the RevoDrive 350 is listed. Select it and click **Next**.

4 Follow the remaining onscreen instructions to complete the installation. Windows may restart your system during the installation.

Set the RevoDrive 350 as a boot device

To set the RevoDrive 350 as a boot device, you must change the boot order in the motherboard BIOS. For full instructions on how to access the BIOS and modify its settings, see the system user manual.

Set the RevoDrive 350 as the primary boot device. Ensure that you save the settings before exiting the BIOS.

Your RevoDrive 350 is now the boot device.

Installation as a storage device in Windows

To use the RevoDrive 350 as a storage device in Windows:

1 Install the hardware; see page 3.

2 Install or update the driver; see page 2.

3 Format the RevoDrive 350 as storage.

The following instructions are a general guideline for installation in Windows 7; it is assumed that you have access to the system user manual for full instructions. Installing in other Microsoft operating systems is similar; see your system user manual.

Format the RevoDrive 350 as storage

Before starting, ensure that you have followed the instructions in Install or update the driver on page 2.

1 Switch on and start up the computer.

2 Click the Windows **Start** button in the taskbar, right-click **Computer** and select **Manage**. The Computer Management window is shown.

3 In the left pane, expand **Storage** then click **Disk Management**. Available disks are listed.

4 Select the RevoDrive 350.
If the RevoDrive 350 is already initialized, go to step 5.
If you have not previously initialized it, wait for the Initialize Disk window to load and click **OK** to initialize it.

5 To format the drive, right click the graphical bar representing unallocated disks and select **New Simple Volume**.

6 Follow the onscreen instructions to finish formatting the drive.

Your RevoDrive 350 is now ready to use for storage.

In Linux, you can do the following:

- Installation as a boot device in Linux; Fedora distributions only
- Installation as a storage device in Linux

Before you start, you must ensure you have the necessary driver: see Managing the Linux device driver.

Managing the Linux device driver

To use the RevoDrive 350 correctly you need the RevoDrive 350 driver. The driver is supplied on CD when you purchase the RevoDrive 350, or to obtain the latest version of the RevoDrive 350 driver:

1. Go to http://ocz.com/consumer/download/drivers.
2. Select RevoDrive 350 from the list of products.
3. Find the operating system that is running on your system and download the appropriate driver.
4. Unzip the required driver onto a CD or a USB flash drive.

Install the driver in Linux

When installing the RevoDrive 350 as a boot device, you install the driver as part of the setting-up process; see Install the driver and set the RevoDrive 350 as a boot device on page 6.
When installing the RevoDrive 350 as a storage device, you can install it manually as described below.

1. Copy the appropriate driver package file for your distribution to a local drive on your system.
2. Enter one of the following commands, where *filename* is the name of the package file that you copied:
   - to install an rpm file: **sudo rpm –U *filename*.rpm**
   - to install a deb file: **sudo dpkg –i *filename*.deb**
3. If you installed the RevoDrive 350 before installing the device driver, you may find that the standard mvsas driver is loaded against the card. A symptom of having the mvsas driver loaded is being presented with multiple SSDs of lower performance, rather than a single drive.
   In this case, to start using the OCZ RevoDrive 350 driver after installing it, you must reboot the system or manually rebind the driver.

Installation as a boot device in Linux

The supported Mint and Ubuntu distributions do not provide a standard method to use the RevoDrive 350 as a system boot drive.

To use the RevoDrive 350 as a boot device in Fedora:

1 Install the hardware; see page 3.

2 Install the driver and set the RevoDrive 350 as a boot device.

Install the driver and set the RevoDrive 350 as a boot device

To use the RevoDrive 350 as the system boot device, you must install the Linux device driver as part of the Linux distribution installation process. Mint and Ubuntu distributions do not provide a driver installation process, so you cannot use them as a system boot device.

To use Fedora distributions as a boot device, we provide **dd** files for each distribution.

1 Go to http://ocz.com/consumer/download/drivers and copy the dd image for your Fedora distribution to a USB flash drive (use the whole USB flash drive, not a partition), using the following command:

dd if=oczpcie_fedora.*XXX***.dd of=***path_to_USB_drive*

2 Boot from the Fedora setup DVD; when the boot menu appears, press **Esc**. A **boot**: prompt is shown.

3 Plug the USB flash drive in. At the boot: prompt enter:

linux ks=hd:*USB_device_name***:/oczpcie.ks**

4 The system starts to boot. Note that the system may stop for several minutes on the Running pre-installation scripts stage; this is normal.

5 When the **INSTALLATION DESTINATION** option is shown, ensure that the RevoDrive 350 drive is selected (NOT the USB flash drive). Note that the Fedora installer may not correctly determine the RevoDrive 350 drive model name and may show it as **Unknown**. Continue the installation as usual.

6 When rebooting at the end of the installation, select the RevoDrive 350 drive as the boot drive.

If you re-install grub2 at any time, you must add **part_msdos** and **part_gpt** to the pre-loaded modules, for example:
grub2-install --modules="part_msdos part_gpt" /dev/*RevoDrive*.
If you do not do this, you may end up with an unbootable system and have to use a recovery disk.

Installation as a storage device in Linux

To use the RevoDrive 350 as a storage device in Linux:

1 Install the hardware; see page 3.

2 Install the driver in Linux; see page 5.

3 Format the RevoDrive 350 as storage using the standard method for your Linux distribution.

Prolonging the Life of Your RevoDrive 350

To prolong the life of your RevoDrive 350, you can:

- Provide adequate cooling
- Disable defragmentation

Provide adequate cooling

To extend the life of your RevoDrive 350, we recommend that your computer system is cooled at 300 Linear Feet Per Minute (LFPM), at an ambient temperature of no more than 55° Celsius.

Disable defragmentation

Defragmentation of hard disks can make their operation more efficient, by writing related data to contiguous spaces on the disk and reducing the distance the disk head has to travel when reading or writing data. However flash-based SSDs do not gain performance improvements from defragmentation, as the increased number of writes shortens the lifespan of the RevoDrive 350.

To check whether defragmentation is set, and to disable the Disk Defragmentation Scheduler (example instructions for Windows 7):

1. Click the Windows **Start** button in the taskbar and type **Disk Defragmenter** in the search field.
2. In the list of search results shown, click **Disk Defragmenter**. The Disk Defragmenter window is shown.
3. To check whether defragmentation is scheduled, click **Configure Schedule**. A window is shown with any details of the schedule.
4. Uncheck (delete the tick from) **Run on a schedule** then click **OK**. The Disk Defragmenter window shows that the defragmentation schedule is off.

Limited Warranty

OCZ products epitomize the vanguard of quality standards as part of our commitment to our customers. All OCZ products are warranted and tested to be free from defects in material and workmanship and to conform to the published specifications. If your OCZ product fails within the warranty period (under normal use in the recommended environment) due to improper workmanship or materials, OCZ will repair the product or replace it with a comparable or better unit. This warranty is subject to the conditions and limitations set forth herein.

Duration of warranty

The OCZ RevoDrive 350 is covered by this warranty for 3 years from the date of purchase. Proof of purchase, including the date of purchase, is required to collect on the warranty. OCZ will inspect the product and decide whether to repair or replace it. OCZ reserves the right to provide a functional equivalent product or a refurbished replacement product.

Limitations

This warranty does not apply to product failure caused by accidents, abuse, mishandling, improper installation, alteration, acts of nature, improper use, or problems with electrical power. In addition, opening or tampering with the product casing, or any physical damage, abuse or alteration to the product's surface, including all warranty or quality stickers, product serial or electronic numbers void the product warranty. OCZ is not responsible for recovering any data lost due to the failure of a flash memory device. OCZ products must be used with devices that conform to the recommended industry standards. OCZ is not liable for damages resulting from a third party device that causes the OCZ product to fail. OCZ is in no event liable for any consequential, indirect or incidental damages, lost profits, lost business investments, lost goodwill or interference with business relationships as a result of lost data. OCZ is not responsible for damage or failure of any third party equipment, even if OCZ has been advised of the possibility. This limitation does not apply to the extent making it illegal or unenforceable under applicable law.

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