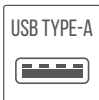




USB TYPE-C DUAL ENCLOSURE FOR PCIe NVMe M.2 SSDs WITH OFFLINE CLONING FUNCTION AND ACTIVE COOLING



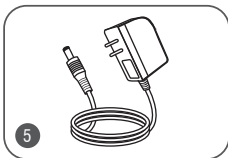
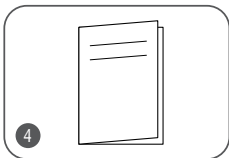
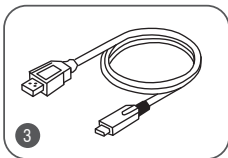
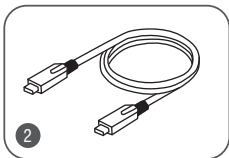
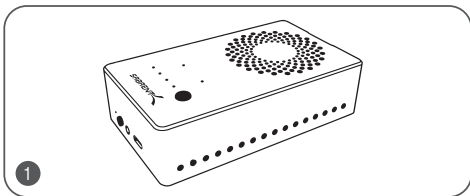
EC-SSD2 / USER MANUAL

FEATURES:

- Read from and write to both SSDs simultaneously.
- Built-in cooling fan will prevent your disks from throttling due to high temperature.
- Full aluminum construction for maximum heat dissipation.
- Transfer data up to 10 Gigabits per second.
- Quick-release lid for fast access and 100% tool-less design.
- Compatible with multiple NVMe SSD form factors: 2230/2242/2260/2280/22100.
- Offline cloning function: Clone drives without using a computer.
- NOT COMPATIBLE with regular M.2 SATA / AHCI SSDs.

SYSTEM REQUIREMENTS:

- Windows 7 and higher
- Mac OS 10.5 and higher
- Linux Kernel 2.4 and higher



1. Dual NVMe SSD enclosure
2. USB Type-C to USB Type-C cable
3. USB Type-C to USB Type-A cable
4. This user guide.
5. AC power adapter - 5V / 4AMP - Required

NOTE: NVMe disks NOT included

WARNING:

Only compatible with M Key M.2 PCIe NVMe SSD.
It is NOT compatible with B Key SSD (SATA-based) or the M Key M.2 SSD (PCIe AHCI-based).



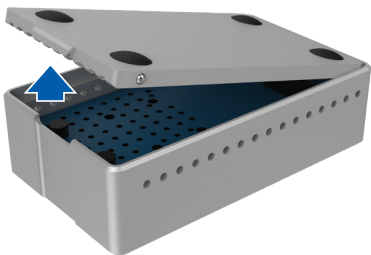
DISK INSTALLATION

Before beginning, disconnect all cables from the enclosure.
It is not necessary to use two disks, this device will work with only one disk installed.

WARNING:

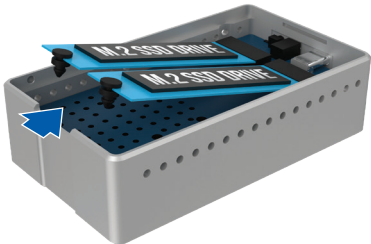
Do not install any disks while the device is powered on or connected to the computer's USB port.

1

**STEP 1**

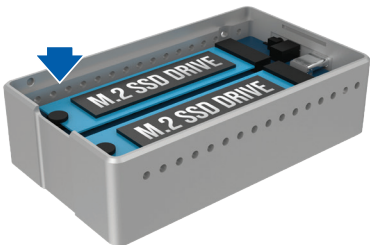
Remove the bottom plate by pulling it up from its protruding notch.

2

**STEP 2**

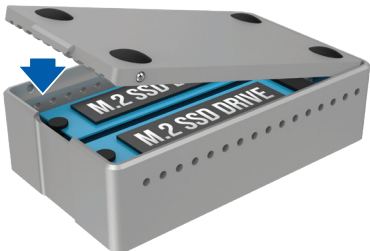
At a 20-degree angle, slide the SSD into the M.2 socket until it is properly seated. Then place the rubber fastener on the disk's notch. The rubber fastener has a slit that will fit the disk's U-shaped notch.

3

**STEP 3**

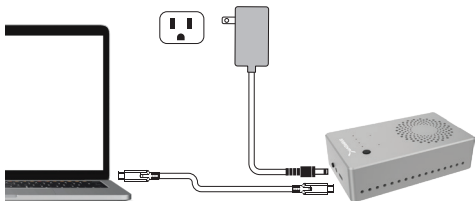
Lower the SSD and carefully push down on the rubber fastener until it goes through the pre-perforated hole in the PCB.

4

**STEP 4**

Place the bottom plate back on the enclosure's slit and push it down until it clicks into place.

CONNECTION DIAGRAM



- Connect the AC adaptor to the wall outlet and to your Sabrent device. The power adaptor is required. **Do NOT use this device without its AC adaptor.**
- Connect the USB cable to both the device and the computer.

OFFLINE CLONING FUNCTION

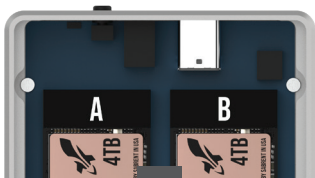
PREREQUISITES

- 1) The source drive has to be of equal or smaller size than the target drive. In other words, if the target drive is smaller than the source drive, the cloning function will not work. For instance, if your source drive (the one you want to clone) has 256 GB, your target drive should at least have 256GB.
- 2) Before cloning, **disconnect the USB** cable from your external enclosure.

OFFLINE CLONING PROCEDURE

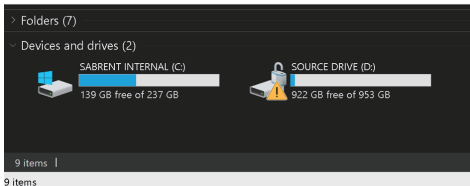
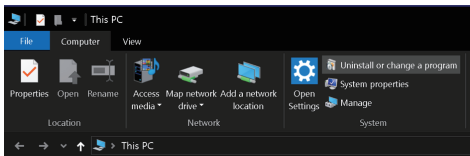
1. Once more, confirm the USB cable is **NOT** connected to the USB enclosure.
2. Your source disk will be in SLOT A, and your target disk will be in SLOT B.
3. After installing both disks, connect your AC adaptor to the wall outlet and to the enclosure.
4. Turn on the enclosure with the power button located on the back.
5. Push and hold down the OFFLINE CLONING button on top of the unit for 3 seconds. The cloning process will begin as soon the progress LEDs start to flash. Let go of the button and let the enclosure work.
6. Once the LEDs stop flashing and all four of them remain solid at 100%, the cloning process is finished. Beware, this process may take a long time, even with extremely fast NVMe disks. It will mainly depend on the size of the disks, and more specifically on the amount and size of small files.
7. You can then reattach the USB cable to both the enclosure and the computer.

WARNING: Never install any disks while the device is powered on or connected to the computer's USB port.



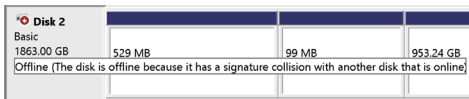
AFTER CLONING – TARGET DRIVE MAY NOT SHOW UP

Depending on your operating system, your newly cloned drive may not show up at all. As you can see in the example below, after successfully finishing the cloning process, the only drive that is available is the SOURCE DRIVE, the target drive is not found under *This PC*.



This happens because there is a signature collision between the drives after they are cloned. As a consequence, the target drive goes *offline*.

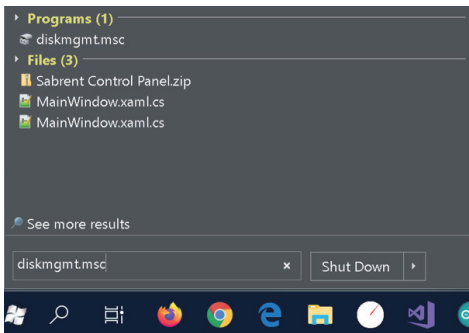
This happens because there is a signature collision between the drives after they are cloned. As a consequence, the target drive goes *offline*.



Disk 2			
Basic			
1863.00 GB	529 MB	99 MB	953.24 GB
Offline (The disk is offline because it has a signature collision with another disk that is online)			

To fix this in Windows (7 or higher), please follow the steps below.

1) First, open up Disk Management. To do this, click on the Start button, type **diskmgmt.msc** and hit the enter key.



2) Once inside Disk Management, right-click on the *offline* drive to open up the context menu, then click on *Online*.

Disk 0 Basic 238.46 GB Online	Recovery 450 MB NTFS Healthy (OEM Partition)	300 MB Healthy (EFI System Partition)
Disk 1 Basic 953.85 GB Online	Recovery 529 MB NTFS Healthy (OEM Partition)	99 MB Healthy (EFI System Part
Disk 2 Basic 1863.00 GB Offline ⓘ	(Partition)	99 MB Healthy (EFI System Pai
■ Unallocated ■ Primary partition		

3) Once the target drive is back online, Windows will assign it a drive letter. Notice they will both have the same drive name, as you can see below.


Disk 1 Basic 953.85 GB Online	Recovery 529 MB NTFS Healthy (OEM Partition)	99 MB Healthy (EFI System Parti
Disk 2 Basic 1863.00 GB Online	529 MB Healthy (Recovery Partition)	99 MB Healthy (EFI System Pai
■ Unallocated ■ Primary partition		

AFTER CLONING – TARGET DRIVE MAY HAVE A DIFFERENT SIZE

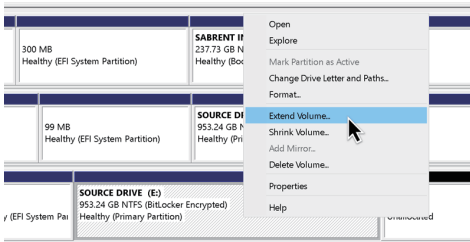
Once the cloning operation is finished, if the target drive is bigger than the source drive, the remainder of the storage space will be left as *unallocated space*. This means that the operating system will show the newly cloned drive (target) as having exactly the same amount of partitions and storage capacity as the original source drive.

To add the *unallocated* space to the last partition of your newly cloned drive, please follow the additional steps.

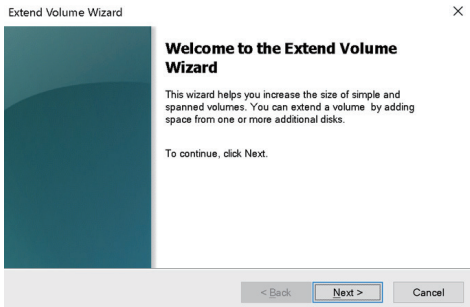
4) Right-click on the last allocated partition of your newly cloned drive.

Disk 1 Basic 953.85 GB Online	Recovery 529 MB NTFS Healthy (OEM Partition)	99 MB Healthy (EFI System Partition)	SOURCE DRIVE (C:) 953.24 GB NTFS (BitLocker Encrypted) Healthy (Primary Partition)
Disk 2 Basic 1863.00 GB Online	529 MB Healthy (Recovery Partition)	99 MB Healthy (EFI System Partition)	SOURCE DRIVE (E:) 953.24 GB NTFS (BitLocker Encrypted) Healthy (Primary Partition) 

5) When the contextual menu appears, click on *Extend Volume...*



6) This will open up the Extend Volume Wizard welcome screen. To continue, click on the *Next* button.



7) The *Extend Volume Wizard* will automatically default to maximizing the remainder of the unallocated space and assign it to the last available partition. Click on the *Next* button to accept the default behavior, or select your custom configuration here.

Extend Volume Wizard


Select Disks

You can use space on one or more disks to extend the volume.

You can only extend the volume to the available space shown below because your disk cannot be converted to dynamic or the volume being extended is a boot or system volume.

Available:

Add >

< Remove

< Remove All

Selected:

Disk 2	930966 MB
--------	-----------

Total volume size in megabytes (MB):

Maximum available space in MB:

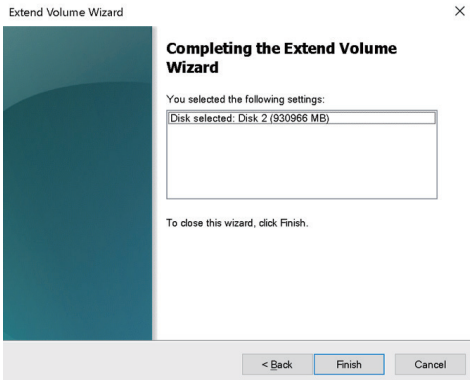
Select the amount of space in MB:

< Back

Next >

Cancel

8) Click on *Finish* to apply the changes.



9) After applying the changes, your *Disk Management* should look similar to the screenshot below.

Disk 1 Basic 953.85 GB Online	Recovery 529 MB NTFS Healthy (OEM Partition)	99 MB Healthy (EFI System Partition)	SOURCE DRIVE (D:) 953.24 GB NTFS (BitLocker E) Healthy (Primary Partition)
	Disk 2 Basic 1863.00 GB Online	529 MB Healthy (Recovery Partition)	99 MB Healthy (EFI System Partition)

USING A BRAND NEW DISK

If you are using a brand new disk, you might have to initialize it before you can use it.

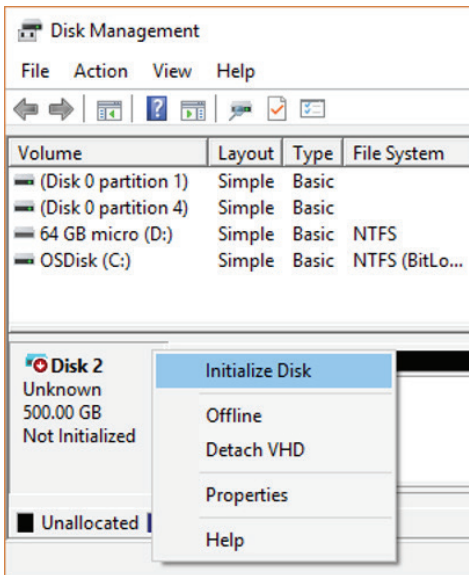
NOTE: Only initialize a disk if you are absolutely sure it is a brand new disk and it does not have any of your data on it. **The initializing process destroys all previous data and renders it irretrievable.**

TO INITIALIZE NEW DISKS

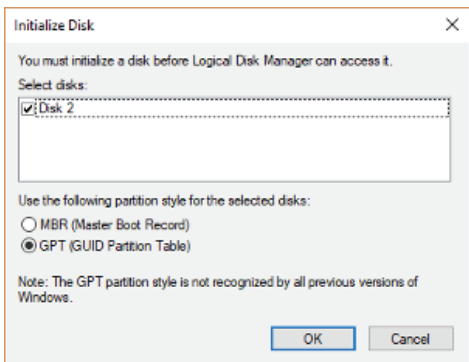
1. Open Disk Management with administrator permissions.

To do so, in the search box on the taskbar, type **Disk Management**, select and hold (or right-click) **Disk Management**, then select **Run as administrator > Yes**. If you can't open it as an administrator, type **Computer Management** instead, and then go to **Storage > Disk Management**.

2. In Disk Management, right-click the disk you want to initialize, and then click **Initialize Disk** (shown next). If the disk is listed as *Offline*, first right-click it and select **Online**.



3. In the **Initialize Disk** dialog box (shown next), check to make sure that the correct disk is selected and then click **OK** to accept the default partition style. If you need to change the partition style (GPT or MBR), you can do it here. The disk status briefly changes to Initializing and then to the Online status.



4. Select and hold (or right-click) the unallocated space on the drive and then select **New Simple Volume**.
5. Select **Next**, specify the size of the volume (you'll likely want to stick with the default, which uses the whole drive), and then select **Next**.
6. Specify the drive letter you want to assign to the volume and then select Next.
7. Specify the file system you want to use (usually NTFS), select **Next**, and then **Finish**.

FOR HELP, COMMENTS, QUESTIONS OR CONCERNS
PLEASE CONTACT OUR TECH SUPPORT TEAM VIA OUR WEBSITE

WWW.SABRENT.COM



WWW.SABRENT.COM