Cable Matters

USB 3.1 Type-C™ Gen 2 Dual-Bay External M.2 NGFF SATA Enclosure
Model 201078

User Manual
(Available in a PDF file)

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1. INTRODUCTION

1.1 Introduction

Thank you for your purchase from Cable Matters® Inc., the 'Reliable Connectivity' company. This User Manual provides an overview of the features and installation of your new:

USB 3.1 Type-C™ Gen 2 Dual-Bay M.2 SATA External Enclosure

Please read these instructions carefully before connecting, operating or configuring this product. Please keep this manual for future reference.

Contact **support@cablematters.com** for questions or product support.

1.2 Copyright and Trademarks

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1.3 FCC Compliance Statement

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) This device must not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation.

2. PRODUCT OVERVIEW

2.1 Package Contents

Please check that the following items are contained in the package:

   1x USB 3.1 External M.2 SATA SSD Enclosure

   4x Enclosure housing screws

   2x M.2 SSD mounting screws

   1x USB 3.1 Type-C 10Gbps cable

   1x USB 3.1 Type-C to Type-A 10Gbps cable

   1x DC to USB power cable

   1x Screwdriver

   1x User Manual (available in a PDF format)

2.2 Product Description

The Cable Matters® USB 3.1 Type-C™ Gen 2 Dual-Bay External Enclosure provides a convenient way to connect two M.2 SATA SSD drives to a computer. Add back-up storage to a computer with USB-A, USB-C or Thunderbolt 3. This compact enclosure supports JBOD, BIG, RAID0 and RAID1 drive configurations to back-up computer files. The SuperSpeed+ USB 3.1 10Gbps data transfer rate increases RAID performance speed when connected to a USB 3.1 Gen 2 compatible computer port.

2.3 Product Features

- · Add portable external storage to a computer with USB-A, USB-C or Thunderbolt 3

- · Migrate files from a computer with USB-A to a new computer with USB-C

- · OS independent with no external drivers or software required

- · Utilize two small form-factor M.2 SATA SSDs in multiple configurations

- · Improve data redundancy with RAID1 or increase performance with RAID0 settings

- · Sturdy aluminum enclosure housing dissipates heat and protects the SSD drives

- · Enclosure supports hardware RAID0, RAID1, BIG (LARGE), and JBOD (PM)

- · Compatible with M.2 SATA SSD sizes 2230, 2242, 2260, and 2280

- · UASP support with a UASP equipped computer

2.4 Installation Checklist

- ✓ Computer with a USB-C or USB-A port or a Thunderbolt 3 port

- ✓ USB-C/USB-A Gen 2 10Gbps port or a Thunderbolt 3 port is required for the max transfer speed

- ✓ USB wall charger or USB charging port for the USB power cord (if needed)

- ✓ M.2 SATA SSD 2230, 2242, 2260 or 2280mm (not PCIe or NVMe compatible)

- ✓ M.2 SATA SSD with B+M key connectors

- ✓ Included screwdriver and mounting screws

- ✓ Included USB and DC to USB cables

- ✓ Anti-static wrist strap or other grounding method (not included)

3. DRIVE INSTALLATION & STORAGE CONFIGURATION

### 3.1 M.2 SATA Drive Installation

⚠️ **Important Note!** Handle drives carefully to avoid damage. Always use an anti-static wrist strap or other grounding method. Place the enclosure tray on a clean, solid surface.

1) Check that the enclosure is turned OFF and not connected to the computer.
2) Remove the mounting screws for each M.2 drive.
3) Carefully insert each M.2 drive. The connector is keyed to fit in one direction only.
4) Gently press down on each drive until it is flush with the mounting hole for 2230, 2242, 2260 or 2280.
5) Hold down each drive and secure it with the mounting screws.

3.2 Connecting the Enclosure to the Computer

1) Connect the provided USB cable to your computer and the USB-C port on the enclosure.
2) Turn on the enclosure with the On/Off switch and check for a white power LED visible on the right front.
3) Check that the LEDs are lit for the D1 or D2 drives. Blue= Recognized / Purple = Not Recognized
4) Set a drive storage configuration mode
5) Initialize and format the SSD drives for your operating system (see pages 4-7).
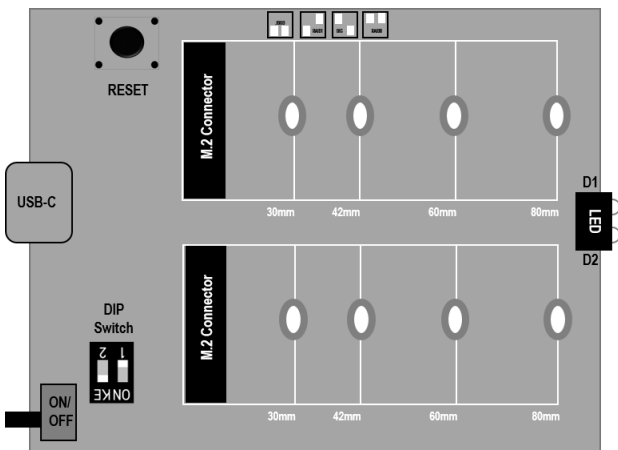
3.3 SSD Drive Storage Configuration Modes

1) Set the dip switches to the desired storage mode.

2) Connect the USB cable to the computer and turn on the enclosure.

3) Press the RESET button for 5 seconds or until the LED blinks to indicate a successful reset.

⚠️ **WARNING:** Pressing the **RESET** button will erase all data from the drive!

ON KE 1 2	Use the screwdriver to select the desired mode	●	Press the RESET button for 5 seconds to set the storage mode

JBOD/PM Mode=1down/2down (Just a bunch of disks) Drives are operated as independent storage. Configuration for 1 or 2 drives.

BIG/LARGE Mode=1up/2down Chains both drives together to operate as one drive. Configuration for 2 drives.

RAID 0 Mode=1up/2up Disk striping interleaves different data across both drives to improve performance. Configuration for 2 drives.
Notes: Use identical SSD drives from the same manufacturer for the best result.
Failure of 1 disk causes both disks to fail. Back-up critical data on separate disk.

RAID 1 Mode=1down/2up Mirroring for fault tolerance. Writes data to both drives at the same time for the highest reliability and redundancy. Configuration for 2 drives.
Notes: Use identical SSD drives from the same manufacturer for the best result.
If one disk fails, insert a replacement disk and wait while the data is copied.

3.4 Securing the Enclosure

1) Eject the Enclosure and turn it off before disconnecting the USB cable.

2) Slide the enclosure tray into the housing and secure with the included screws.

3) Stick on the included foot pads after formatting and testing the drives.
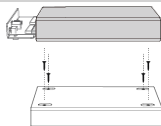
4. DRIVE FORMATTING FOR WINDOWS & MAC

### 4.1 Initializing & Formatting the SSD Drives in Windows 10

1) Turn on the power and connect the USB-C cable. Check that the blue LEDs are lit.

2) Search for **Create and format hard disk partitions**

> **Create** and format hard disk partitions
> Control panel

3) Open the **Disk Management** utility

4) Click **OK** in the **Initialize Disk** menu to initialize the SSD (Right-click to open the menu, if needed)

5) Right-click on the **Unallocated** Disk to open and select the **New Simple Volume**

6) Follow the wizard instructions (see next page). Most drives can use the default settings.
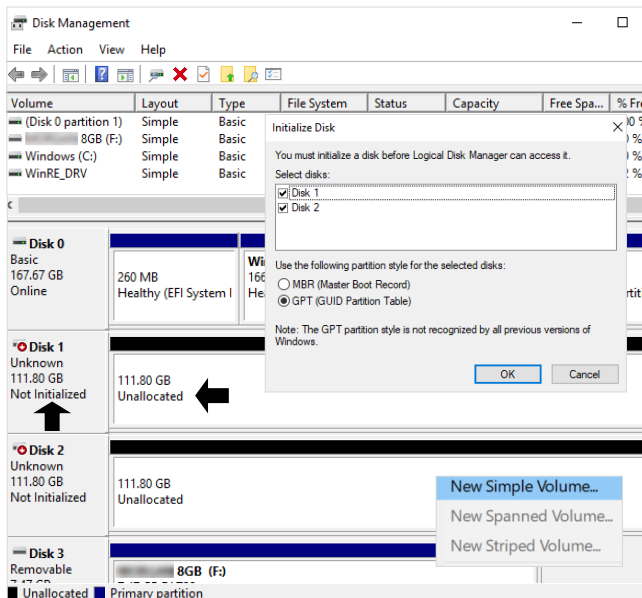
4.1 Initializing & Formatting the SSD Drives in Windows 10 (continued)

Use the *Simple Volume Wizard* to perform the following functions:

* Partition a drive	* Format a drive
* Change the drive letter	* Shrink a partition
* Delete a partition	* Change a drive file system type
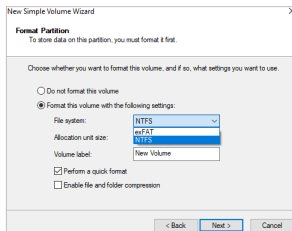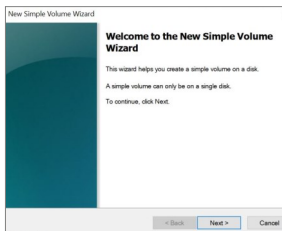
- Use the default menu choices when uncertain
- Select the *exFAT* file system to share the SSD enclosure with a Mac computer
- A notification window will list the successful operations. Click *Finish*.
- The disk/disks should now appear as *Healthy* in the *Disk Management* menu
- The LEDs should be blue. If the LEDs are purple, check the Troubleshooting steps on Page 8
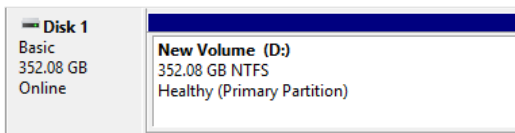
BIG/RAID1/RAID0 show as one Disk

- Open **File Explorer** to access the Enclosure and transfer files
- Use the *Safely Remove* icon from the taskbar or the notification area before removing the Enclosure to prevent damage to the drives
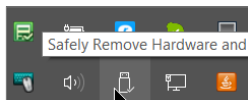
4.2 Initializing & Formatting the SSD Drives in macOS
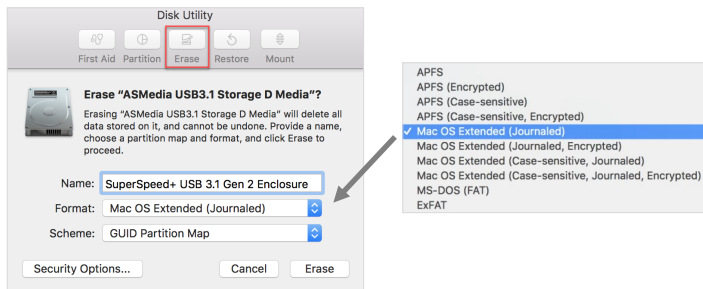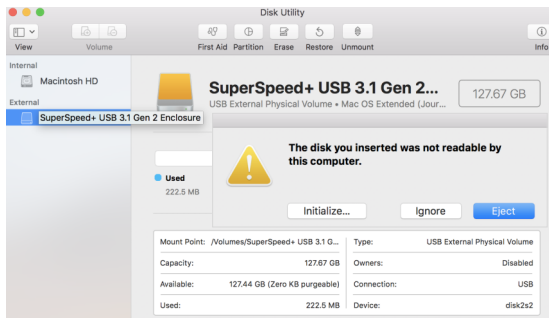
1) Turn on the power and connect the USB-C cable

2) Check that the LED for each Disk is blue

3) Select *Initialize*, when prompted (or open *Finder* > *Utilities* > *Disk Utility*)

4) Click *Erase* and provide a *Name*, *File Format*, and partition *Scheme*

(Select exFAT file format to share with a Windows computer

5) Click the Eject button on the menu before removing the drives

5. Troubleshooting Notes

⚠️ · DO NOT reset the storage configuration mode (JBOD/RAID0/RAID1/BIG) and press the reset button if there is any important data on the SSD. Back-up the data first.

· Check with the SSD manufacturer for management and diagnostic software.

· Disconnect and turn-off the Enclosure, reboot the computer, and then reconnect the Enclosure.

· Hot-swapping of the SSD drives is not supported and may corrupt the data.

· A USB-C Gen 2 port should provide sufficient power for the enclosure. Connect the DC to USB power cable and a wall charger if the LEDs will not light or the light is purple after the SSD is inserted.

· Do not connect the DC to USB power cable BEFORE connecting the USB cable to the computer.

· Disks previously formatted as RAID0 or RAID1 with another computer or enclosure may not be readable in this Enclosure. Back-up the data to another disk and re-format the disks with this Enclosure.

· Try a different storage configuration mode (JBOD/BIG/RAID0/RAID1) as a test if new SSD disks are not recognized.

· Try a different USB-A or USB-C port on the computer.

· Test the USB cable with a different device.

Windows OS:
· Check to see if your computer recognizes the Enclosure: Device Manager > Storage controllers > USB Attached SCSI (UAS) Mass Storage Device

macOS:
· Check to see if your computer recognizes the Enclosure: About this Mac > System Report > USB Device Tree > USB 3.1 Bus > MiniRAID

Contact **support@cablematters.com** for a warranty replacement if you believe that the Enclosure is defective. If your SSD disks were formatted in the Enclosure, they can be inserted into the replacement and the storage configuration format will be recognized.

6. TECHNICAL SPECIFICATIONS

SSD Support:	SATA I (1.5 Gbps), II (3 Gbps), III (6 Gbps)
	M.2 NGFF SATA drive 30mm/42mm/60mm/80mm
	(Not compatible with an M.2 NVMe or PCIe SSD)
M.2 SSD Supported Sizes:	30mm/2230, 42mm/2242, 60mm/2260, 80mm/2280
Supported Storage Modes	RAID0, RAID1, BIG, JBOD
Drive Connectors:	2x M.2 SATA (67 pin NGFF) Receptacle
External Host Interface:	USB-C 3.1 Gen 2 10Gbps 10 pin female
OS Computer Host Support:	Windows, macOS, Linux with USB-C or Thunderbolt 3
Compliance Certifications:	C E
Included Cables:	USB-C 3.1 Gen 2 10Gbps data cable
	USB-A to USB-C 3.1 Gen 2 10Gbps data cable
	3.5mm DC to USB-A power cable
DC Power Port:	5V/2A
LED Indicators:	White = Power / Blue & Purple = SSD drive status
Enclosure Housing (LxWxH)	4.9 x 3.1 x 0.8 Inches
Enclosure Weight	4.8 Ounces
Warranty:	Limited One-Year

Note: Specifications are subject to change without notice

7. WARRANTY & SUPPORT INFORMATION

7.1 Customer Support and Contact Information

Cable Matters offers lifetime technical support as an integral part of our commitment to provide industry leading solutions. Email us with any questions at **support@cablematters.com.**

7.2 Warranty Information

This product is backed by a limited one-year warranty. The warranty covers parts and labor costs only. Cable Matters does not warrant its products from defects or damages arising from misuse, abuse, or normal wear.

7.3 Limitation of Liability

In no event shall Cable Matters Inc. (including their officers, directors, employees or agents) be liable for any damages (whether direct or indirect, special, punitive, incidental, consequential, or otherwise), loss of profits, loss of data, loss of business, or any pecuniary loss, arising out of, or related to the use of this product exceeding the actual price paid for the product (as allowed by state law).

View other SATA SSD products at www.cablematters.com

USB-C™ 3.1 Gen 2 External SATA SSD Enclosure

Model 201079

USB-C™ 3.1 Gen 2 External Dual-Bay SATA SSD Enclosure

Model 201080

USB-C™ 3.1 to 2.5" SATA HDD Adapter

Model 202042

USB-C™ 3.1 Dual Bay SSD Dock with Cloning

Model 202014