# OWC Express 1M2

Support Manual


# Introduction

## 1.1 System Requirements

**Operating System & Hardware**

- Works with any USB4 or Thunderbolt (USB-C) equipped:
  - **Mac** : macOS 10.13 or later
  - **PC** : Windows 10 or later

    - **iPad** : iPadOS 13 or later
    - **iPhone** : current version recommended
    - **ChromeOS** : current version recommended
    - **Android** : Android OS 10 or later
- USB4 Specification supports compatibility with Thunderbolt 3 hosts. However, hosts with Thunderbolt 3 ports will experience limited performance up to USB 10Gb/s.

Supported Drives

- NVMe M.2 SSDs with 2280 / 2242 / 2230 form factor
    - Double-Sided | Single-Sided NVMe M.2 SSDs

## 1.2 Package Contents

- **(1)** OWC Express 1M2
- **(1)** 0.3M (12")USB4 Cable
- **(1)** Screwdriver (enclosure only)
- **(1)** OWC Express 1M2 Getting Started QR Insert Card

## 1.3 Overview

**A.** (1) **LED Indicator** – **Power & Data Connection** = Solid White / **Data Activity** = Blinking White

- The brightness of the LED indicator can be adjusted using a switch on the board inside the OWC Express 1M2.

**B.** (1) **OWC ClingOn ready cable stabilizer mounts** – OWC ClingOn can further secure USB4 and Thunderbolt (USB-C) device cables(s). (Sold separately at go.owc.com/clingon ).

**C.** (1) **USB4 40Gb/s Port** - Attach the included data cable.



# Getting Started

## 2.1 Device Setup

- This section describes the process of setting up the OWC Express 1M2 if purchased with a pre-installed drive (NVMe SSD installed from factory).

**1.** Connect the included 0.3M (12") USB4 cable to the USB4 port on the back of the OWC Express 1M2. Connect the other end of the cable into a compatible host.

**2.** The OWC Express 1M2 comes formatted as APFS for Mac systems. This allows for a seamless plug-and-play experience between Mac and iPad systems. Connect the OWC Express 1M2 to a Mac or iPad and immediately begin using the drive.

- **NOTE** : Windows, ChromeOS, and Android users will need to reformat the Mac formatted OWC device over that operating system to begin use. Please consult the support article " OWC Drive Setup Over Non-Apple Platforms " for instructions regarding reformatting the OWC Express 1M2 to work with Windows, ChromeOS, or Android operating systems.

- **NOTE** : Please consult the Support Manual for OWC Drive Guide or Drive Guide Support Guide page for additional information regarding OWC Drive Guide.

# 2.2 Assembly Steps

- This section describes the process of installing a drive into the OWC Express 1M2.

  - **NOTE**: OWC Express 1M2 Drive Installation Instructional Video

## Opening the Enclosure

**1.** Place the OWC Express 1M2 upside down on a flat static free surface. Remove the (2) exposed case screws, with the included driver, which will allow access to the inside of the enclosure. The screws may already be removed and included in a baggie with the enclosure.

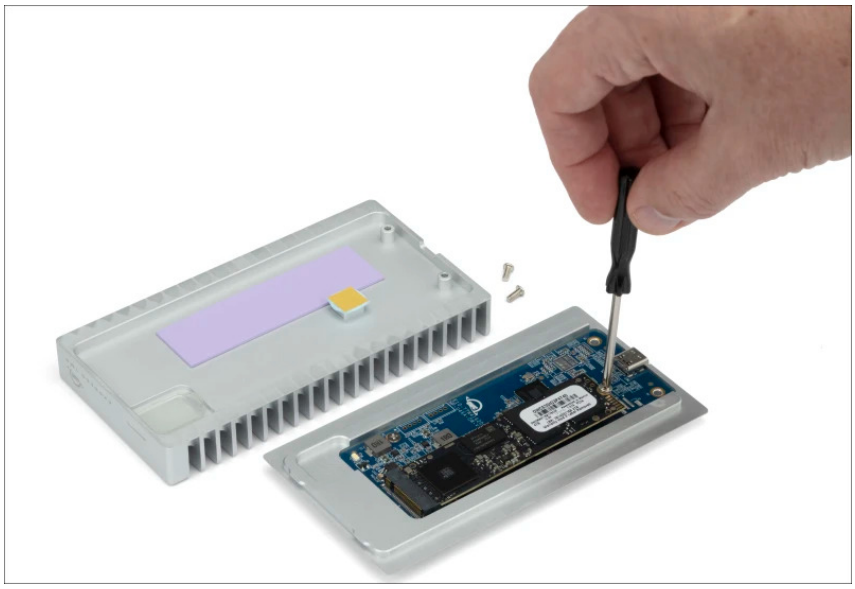
**2.** After the screws are removed, push the bottom tray away from the rubber foot to create separation from the top cover. Lift the bottom tray away from the top cover.

**3.** The drive post is pre-installed for a 2280 NVMe M.2 SSD. All other NVMe M.2 SSD form factors (2242 | 2230) will need the drive post moved to the corresponding position. The position of the drive post will can determined by the NVMe M.2 drive form factor identification markings on the PCBa.


## 2280 Form Factor

**1.** Carefully align the drive at a slight angle into the board connection and slide it forwards until fully seated.

**2.** Once the drive is fully seated use the included drive screw to secure the drive.



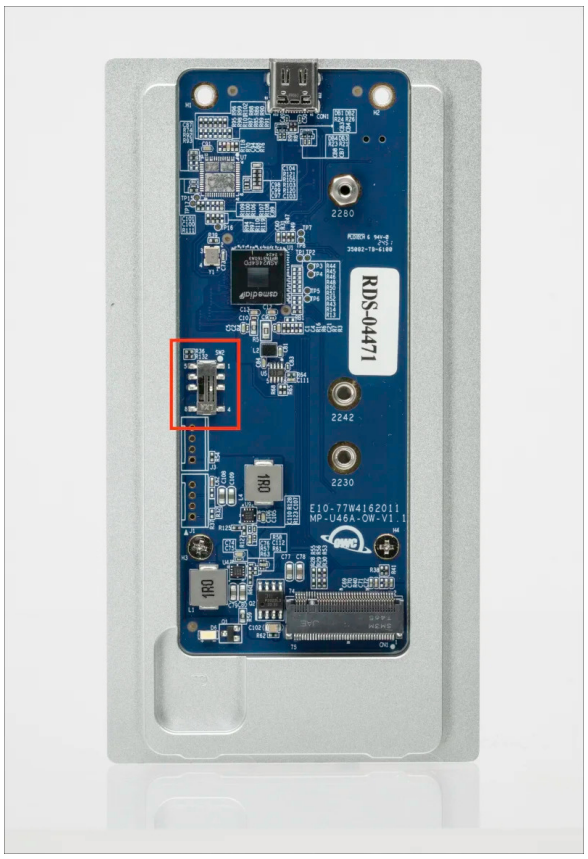
## 2242 | 2230 Form Factor

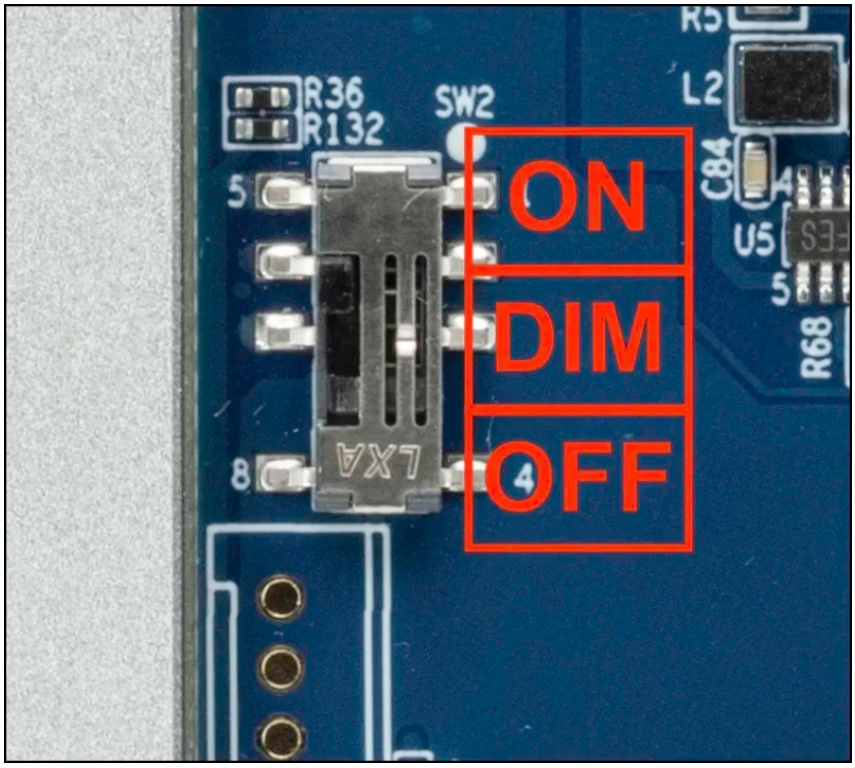
**1.** Loosen the drive post with a 5mm hex socket (not included), and move the drive post to the desired form factor position.


**2.** Carefully align the drive at a slight angle into the board connection and slide it forwards until fully seated. Once the drive is fully seated use the included drive screw to secure the drive.

## Closing the Enclosure

**NOTE:** The brightness of the LED indicator can be adjusted using a switch on the board inside the OWC Express 1M2. The brightness should be adjusted before closing the enclosure.


RDS-04471
2280
2242
2230
E10-77W4162011
MP-U46A-OW-V1.1


R36
R132
SW2
ON
DIM
OFF
L2
C84
U5
R68
5
8
4

**1.** Align the bottom tray and top cover so the thermal pad rests over the NVMe M.2 SSD. Place the bottom tray onto the top cover and slide the pieces together. Press down on the top cover to ensure a strong bond with the NVMe M.2 SSD.

**2.** Secure the cover using the (2) removed case screws form earlier.

**3.** Peel the back of the rubber foot to expose the adhesive. Place and press the rubber foot into the notch housing the case screws.

**4.** Connect the included 0.3M (12") USB4 cable into OWC Express 1M2 USB4 port and into a system. The installed drive is ready to be formatted.

- Mac Formatting Guide
- Windows Formatting Guide

# Device Management

## 3.1 OWC Disk Performance

- As of Windows 10 v. 1809 the default Disk Removal Policy is ‘Quick removal’ instead of ‘Better performance’.
    - **NOTE** : OWC storage solutions that are experiencing slow read/write speeds should consider checking and changing the Windows disk removal policy. Changing from "Quick removal" to "Better performance" can increase disk performance. OWC offers the application OWC Disk Performance to help change the Disk Removal Policy. Changing from "Quick removal" to "Better performance" can also be changed manually.
- Please review the support article Storage Solutions: OWC Disk Performance for more detail.

## 3.2 Manually Unmounting Volumes

- To ensure no data is lost during normal use, always eject or unmount the corresponding volume(s) from the operating system before powering off and disconnecting the device. Unmounting options are provided below.

**macOS**

- Drag the icon for the device you wish to unmount to the trash can; OR
- Right-click the device icon on the desktop, then click “Eject”; OR
- Highlight the device on your Desktop and press Command-E.

**Windows**

- Windows 10 build 1809 (October 2018) or later:
    - Eject the drive by clicking the ‘Show hidden items’ menu in the Taskbar, then clicking ‘Safely Remove Hardware and Eject Media’, and last select the ‘Eject’ option for this volume.
- Windows 10 build 1803 and earlier:

- Go to the System Tray (located in the lower right corner of your screen). Click on the “Eject” icon (a small green arrow over a hardware image).
- A message will appear, detailing the devices that the “Eject” icon controls, i.e., “Safely remove...” Click on this prompt.
- You will then see a message that says, “Safe to Remove Hardware.” It is now safe to disconnect the device from the computer.

## 3.3 Usage Notes

- The brightness of the LED indicator can be adjusted using a switch on the board inside the OWC Express 1M2.
- NVMe SSDs with a heatsink will not fit and are not supported.
- USB4 Specification supports compatibility with Thunderbolt 3 hosts. However, hosts with Thunderbolt 3 ports will experience limited performance up to USB 10Gb/s.
- Select high power-draw NVMe SSDs may require more power than provided by the OWC Express 1M2. OWC recommends considering an OWC Express 1M2 capacity solution for NVMe SSD users with a high power-draw drive.
- Does not mount if being connected as the third bus powered device with select Mac systems, including the Apple (M4) MacMini16,11 and Apple (M4 Max) Mac Studio.
- Not compatible with the front USB-C or USB-A ports of a Sony Playstation 5.
- Hosts with Thunderbolt 3 ports will experience performance up to USB 10Gb/s.
- OWC storage solutions that are experiencing slow read/write speeds should consider checking and changing the Windows disk removal policy. Changing from ‘Quick removal’ to ‘Better performance’ can increase disk performance.
    - OWC offers the application OWC Disk Performance to help change the Disk Removal Policy. Changing from Quick removal to Better performance can also be changed manually. Please review the support articleStorage Solutions: OWC Disk Performance for more detail.
- Mounts as an internal drive when connected to an Apple silicon system through an OWC 14-Port Thunderbolt 3 Dock

# Support Resources

## 4.1 Troubleshooting

- Verify the USB4 cable is securely connected between the OWC Express 1M2 and host.
- Connect the OWC Express 1M2 and host with a different USB4 cable.
- Connect the OWC Express 1M2 to a different host.
- Users experiencing slow read/write speeds should consider checking and changing the Windows disk removal policy. Please review the support articleStorage Solutions: OWC Disk Performance for more detail.
- We are very sorry If issues continue to occur. Please know that OWC support is here to help. Contact information for our support can be found in **section 4.4 "Contacting Support"** Please have your serial number ready which is located on the bottom of the OWC Express 1M2 and printed on the original packaging.

## 4.2 Online Resources

- OWC Express 1M2 Product Page
- OWC Express 1M2 Support Guide Page
- Support Manual for OWC Drive Guide
- Drive Guide Support Guide
- OWC Disk Performance Download
- OWC Drive Setup Over Non-Apple Platforms Support Article

## 4.3 About Data Backup

To ensure that your files are protected and to prevent data loss, we strongly suggest that you keep two copies of your data: one copy on your OWC Express 1M2 and a second copy on either your internal drive or another storage medium, such as an optical backup, or on another external storage unit. Any data loss or corruption while using the OWC Express 1M2 is the sole responsibility of the user, and under no circumstances may OWC, its parents, partners, affiliates, officers, employees, or agents be held liable for loss of the use of data including compensation of any kind or recovery of the data.

## 4.4 Contacting Support

- Phone, Chat, and Email support is available by visiting (owc.com/support)

## 4.5 About This Manual

The images and descriptions may vary slightly between this manual and the unit shipped. Functions and features may change depending on the firmware version. The latest product details and warranty information can be found on the product web page. OWC's Limited Warranty is not transferable and

### General Use Precautions

- To avoid damage, do not expose the device to temperatures outside the following ranges:
  - **Environmental (Operating)**
    - Temperature (ºF): 41º — 95º
    - Temperature (ºC): 5º — 35º
  - **Environmental (Non-Operating)**
    - Temperature (ºF): -4º — 140º
    - Temperature (ºC): -20º — 60º
- Always unplug the device from the electrical outlet if there is a risk of lightning or if it will be unused for an extended period-of-time. Otherwise, there is an increased risk of electrical shock, short-circuiting, or fire.
- Protect your device from excessive exposure to dust during use or storage. Dust can build up inside the device, increasing the risk of electrical shock, short-circuiting, or fire.

### Safety Precautions

- Use proper anti-static precautions when handling this device. Failure to do so can increase the risk of electrical shock or short-circuiting.

- Never expose your device to rain, or use it near water, or in damp wet conditions. Never place objects containing liquids on the device, as they may spill everywhere and into the openings. This will increase the risk of electrical shock, short-circuiting, fire, or personal injury.

- To avoid any risk of electrical shock, short-circuiting, fire, or dangerous emissions, never insert any metallic object into the device.

- Please cease use of the device and contact OWC Support if it appears to be malfunctioning.

# Terms & Conditions of Sale

## Warranty

OWC's products are subject to OWC's Terms & Conditions of Sale located at Terms of Sale or other applicable terms. The OWC Express 1M2 comes with a 3-Year Limited Warrantywhen sold with drives, and a 2-Year Limited Warranty when sold without drives. Additional warranty information can be viewed by visiting Hardware Warranties

## Changes

The material in this document is for information purposes only and subject to change without notice. While reasonable efforts have been made in the preparation of this document to assure its accuracy, OWC, its parent, partners, affiliates, officers, employees, and agents assume no liability resulting from errors or omissions in this document, or from the use of the information contained herein. OWC reserves the right to make changes or revisions in the product design or the product manual without reservation and without obligation to notify any person of such revisions and changes.

## FCC Statement

**Warning** ! Modifications not authorized by the manufacturer may void the user's authority to operate this device.
**NOTE** : This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference with radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.

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