



Mercury Elite Pro Dual with 3-Port Hub

Assembly Manual & User Guide



Dual Bay
RAID Array



Works with any USB
computer or device



Mac, Windows, &
mobile devices

Introduction

1.1 Minimum System Requirements..... 1

- Mac Requirements
- PC Requirements

1.2 Package Contents..... 1

1.3 About This Manual..... 1

1.4 Dock Ejector 3

1.5 Front View..... 3

1.6 Rear View..... 3

1.7 Usage Notes 4

Device Setup

2.1 Quick Start Guide 5

2.2 Assembly Steps 5

2.3 RAID Settings 7

Support Resources

3.1 Formatting 9

3.2 Troubleshooting 9

3.3 About Data Backup 9

3.4 Contacting Technical Support..... 9

1.1 System Requirements

Operating System

- Compatible with any Mac or PC running MacOS, Windows, or Linux with an available USB port. Also compatible with tablets and mobile device such as iPad Pro with an available USB port.
- Note: This device will connect at the maximum speed supported by your computer:
 - 10Gb/s speed: Most Thunderbolt 3 and USB 3.1 Gen 2 equipped 2016 or later computers
 - 5Gb/s speed: most USB 3.0 or 3.1 Gen 1 USB-A or USB-C equipped 2015 and earlier computers
 - 480MB/s: most USB 2.0 equipped 2011 and earlier computers

Supported Drives

- Any 3.5-inch or 2.5-inch SATA drive

1.2 Package Contents



OWC Mercury Elite Pro Dual
with 3-Port Hub



USB-C to USB-C cable



USB-C to USB-A cable



Power supply
and cable



Quick Start Guide

1.3 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 subject to limitations.



General Use Precautions

- To avoid damage, do not expose the device to temperatures outside the following ranges:

Environmental (Operating)

- Temperature (°F): 41° – 95°
- Temperature (°C): 5° – 35°

Environmental (Non-Operating)

- Temperature (°F): -4° – 140°
- Temperature (°C): -20° – 60°

- 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.
- Do not use the device near other electrical appliances such as televisions, radios or speakers. Doing so may cause interference which will adversely affect the operation of the other products.
- Do not place the device near sources of magnetic interference, such as computer displays, televisions or speakers. Magnetic interference can affect the operation and stability of hard drives.
- Do not place objects on top of the device.
- Protect your device from excessive exposure to dust during use or storage. Dust can build up inside the device, increasing the risk of damage or malfunction.
- Do not block any ventilation openings on the device. These help to keep the device cool during operation. Blocking the ventilation openings may cause damage to the device and cause an increased risk of short-circuiting or fire.



Safety Precautions

- Read this user guide carefully and follow the recommended steps for assembly.
- Use proper anti-static precautions while installing your hard drives into this drive enclosure. Failure to do so can cause damage to your drive mechanisms and/or the enclosure.
- Do not attempt to disassemble or modify the device. To avoid any risk of electrical shock, fire, short-circuiting or dangerous emissions, never insert any metallic object into the device. If it appears to be malfunctioning, please contact technical support.
- Never expose your device to rain, or use it near water or in damp or wet conditions. Never place objects containing liquids on the drive, as they may spill into its openings. Doing so increases the risk of electrical shock, short-circuiting, fire or personal injury.

1.4 OWC Dock Ejector

This application safely ejects all drives connected to the Mercury Elite Pro Dual with 3-Port Hub with a single click, adding peace of mind to fast-paced mobile workflows. To install this app, please follow the steps below.

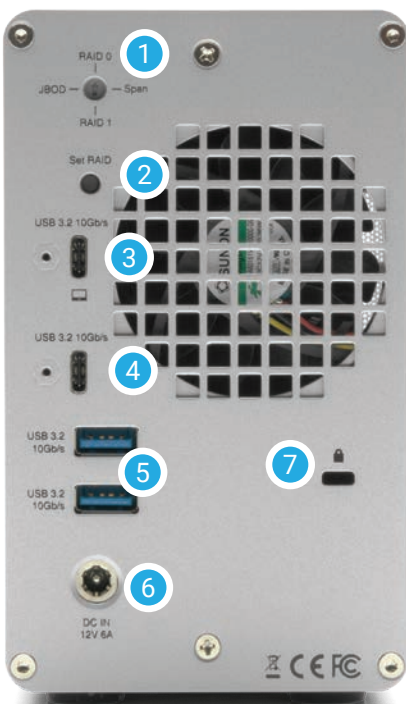
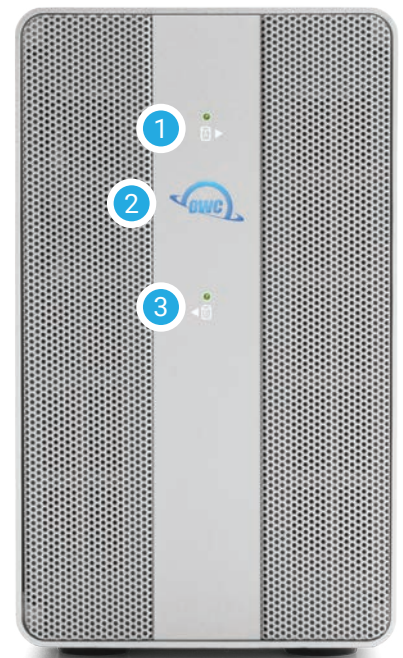
1. Download the installer file: For Mac download.owcdigital.com/dockejector/mac or for Windows download.owcdigital.com/dockejector/win
2. Launch the installer and follow the prompts. No restart is required.
3. Once the app is running an icon like the one shown below will appear in the macOS menubar, or, System Tray on Windows.



To learn more about OWC Dock Ejector please visit: go.owcdigital.com/dockejector.

1.5 Front View

1. Drive A LED – will blink red for disk errors or missing disks, will blink green during normal activity.
2. Power LED – solid white when connected to power and solid blue when connected to both power and an active host.
3. Drive B LED – will blink red for disk errors or missing disks, will blink green during normal activity.



1.6 Rear View

1. RAID selector dial – See Section 2.3 for details.
2. Set RAID button – See Section 2.3 for details.
3. USB 3.2 10Gbps USB-C host port – connect a compatible host computer here.
4. USB 3.2 10Gbps USB-C hub port – connect a compatible USB device here. Up to 3A bus power provided.
5. (2) USB 3.2 10Gbps USB Type-A hub ports – connect a compatible USB device here. Up to 900mA bus power per port.
6. DC IN – connect the included power supply here.
7. Security slot – connect a security tether here.

1.7 Usage Notes

- Identical drives (model, capacity, firmware) are required for RAID configurations.
- Only USB-C host port listed in Section 1.6 can be used for the connection to the computer.
- The Mercury Elite Pro Dual with 3-Port Hub needs an active data signal to remain powered on. If it is disconnected from the computer, or if the computer goes to sleep or turns off, the device will power off.
- For information on changing the RAID mode, please see Section 2.3.
- To ensure no data is lost during normal use, always eject or unmount the corresponding disk(s) from your operating system before powering off the device. Several options are provided below for Mac and PC.

macOS

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

Windows

1. 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).
 2. A message will appear, detailing the devices that the "Eject" icon controls, i.e., "Safely remove..." Click on this prompt.
 3. You will then see a message that says, "Safe to Remove Hardware." It is now safe to disconnect the Mercury Elite Pro Dual with 3-Port Hub from the computer.
- The steps above are applicable to Windows 10 build 1803 and earlier. If you are using Windows 10 build 1809 (October 2018) or later, you can 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.

INSTALLATION

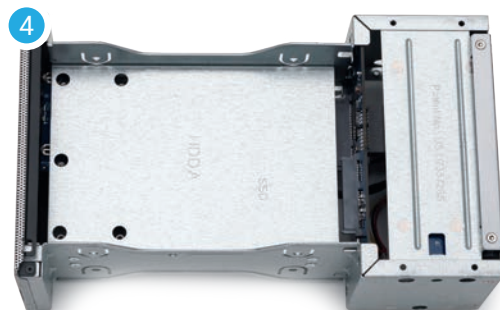
2.1 Quick Start

If you purchased the Mercury Elite Pro Dual with 3-Port Hub as an empty enclosure, proceed to Section 2.2 below. If you purchased the Mercury Elite Pro Dual with 3-Port Hub with drives installed, the OWC Drive Guide formatting utility has been installed. Follow these steps go.owc.com/storage/formatting to use the Drive Guide to format your drives for macOS or Windows.

2.2 Assembly Steps

This section describes the process of installing your own drives; additional formatting information is available in Section 3.1. If your Mercury Elite Pro Dual with 3-Port Hub shipped with drives installed, they are pre-configured as a RAID 0; see the steps above for using Drive Guide to format your RAID 0 volume.

1. Remove the device from the box and set on a static-free work surface.
2. Remove the two screws highlighted in red from the back of the enclosure and set them aside.
3. Pull on the front edge of the enclosure so the inner-chassis slides out, then remove it fully.
4. Set the inner chassis flat on the work surface.



5. Set a 2.5 inch or 3.5 inch SATA drive into the drive housing, then seat the drive on the SATA connector as shown. Minimal force is required.
6. Affix the drive to the inner-chassis at the location(s) shown — holes for the slightly larger 3.5 inch drive screws are circled in red, the hole for a 2.5 inch drive is circled in yellow. Note: a total of one screw is required for 2.5 inch drives, and four screws (two on each side) for 3.5 inch drives.
7. Once the first drive is secured, flip the inner chassis and repeat Steps 5 and 6 as needed. IMPORTANT: by default, this device is set to configure any installed drives as a RAID 0, once it is powered on and connected to the host. If you intend to change the RAID mode RAID 1, Independent, or SPAN, you can do so now or after re-assembly. See Section 2.3 for information on how to set the RAID mode.
8. Make sure the ports on the back of the inner chassis and the port cut-outs on the back of the outer enclosure are oriented the same way, then slide the inner chassis into the outer enclosure so that the chassis' front plate is flush with the cover's front edge.
9. Re-affix the screws you removed in Step 2. This completes the assembly process.

This completes the assembly process.



2.3 RAID Settings

Changing the RAID Mode

- The RAID mode is controlled by a dial near the top-left corner on the rear plate, in combination with the RAID set button which is just below the dial.
- The dial has four positions, each labeled with a different RAID mode. To change the RAID mode, make sure the device is disconnected from the host and powered off, then rotate the RAID dial using a paper clip or flat-head screwdriver (size SL2.5 or SL2 should work) so the arrow points to the desired RAID mode. Each time the arrow is aligned with a new mode, you should feel a slight click.
- Once you've changed the RAID mode, reconnect the power supply cable then use a paperclip or small screwdriver to press the RAID Set button. Then connect the USB 3.2 data cable to the host computer. The button should remain pressed until the new volume(s) appear on your Desktop and/or a notice is displayed to format the new volume(s).

Warning

If there is any data on the drives being installed, choosing any mode other than Independent Mode, will result in the loss of all data on the drives!

RAID 0 "Drive Striping" Mode

- The two drives show up as a single large disk with a size equal to the combined capacities of both drives. RAID 0 is used when speed is the primary objective; it does not provide data redundancy for protection. The reading and writing of data files is spread across both drives to gain speed by distributing the workload. This allows for the fastest data transfer rates, but if one drive fails the whole array becomes corrupted. The data will be lost.

RAID 1 "Drive Mirroring" Mode

- The two drives show up as a single disk with a size equal to the capacity of a single drive from the array. RAID 1 copies (or "mirrors") the data from the first drive to the second drive. This is useful when reliability and redundancy are more important than capacity or maximum speed. When one drive fails, it can be replaced and the data can be rebuilt automatically from the other functioning drive. See the Replacing Drives section for more details on the drive replacement and rebuild process.

Span Mode

- Both drives show up as a single large disk, but one which functions differently than RAID 0 or RAID 1. The total size depends on the drives installed; unlike RAID 0 or RAID 1 you can use drives of different capacities. A SPAN is an array (but not a RAID) in which the data is written sequentially across the drives. When one drive becomes full, subsequent data is written to the second drive. This combines the capacities of the drives, but it does not provide any performance or data redundancy benefits.

Independent Drive Mode

- Each drive will appear individually without being combined. If you are using drives of differing capacity and model, or if you are using only one drive, this is the mode to use.

(Continue to next page)

2.3 RAID Settings (Continued)

Drive Failure

- If one of the drives fails (or is missing or not connected properly), the corresponding drive LED on the front of the device will blink red. If the Mercury Elite Pro Dual with 3-Port Hub was configured as a RAID 0, the data on the array is lost and the disk is no longer usable. In a SPAN, only the data stored on the failed drive is lost, although data recovery software will be required to retrieve the data from the other drive. If the drives were configured independently, then the data on the drive that did not fail will remain intact.

Replacing Drives

- If the Mercury Elite Pro Dual with 3-Port Hub is set up as a RAID 1, a drive that has failed can be replaced to rebuild the array. The data will remain accessible via the functioning drive until the array is rebuilt with a new drive. If the enclosure was purchased with drives and it is still under warranty, contact OWC technical support for assistance (see Section 3.4). If the unit is outside its warranty or was purchased without drives, follow the assembly instructions to access and replace the failed drive. Afterwards you can re-assemble the enclosure, then connect it to power and the host computer.

Note

A failed drive must be replaced with an identical drive (model, capacity, firmware).

Note

The Mercury Elite Pro Dual with 3-Port Hub needs an active data signal to remain powered on. If it is disconnected from the computer, or if the computer goes to sleep or turns off, the device will power off. To minimize the rebuild time, it is recommended to keep the device connected to the computer (with the computer powered on), and disable any drive sleep settings on the computer for the duration of the rebuild process.

3.1 Formatting

For additional formatting information, including instructions on how to format your Mercury Elite Pro Dual with 3-Port Hub for Mac or Windows, go to: go.owc.com/storage/formatting

3.2 Troubleshooting

Begin by verifying that the power cable is connected to the Mercury Elite Pro Dual with 3-Port Hub and to a power source. If the power cable is connected to a power strip, make sure that the power strip switch is in the ON position. Next, verify that each end of the data cable is properly plugged into the computer and the enclosure, respectively. If you are still having trouble, try connecting a different 10Gbps USB cable and see if the Mercury Elite Pro Dual with 3-Port Hub works properly; you can also connect the device to a different computer.

If one of the drive LEDs (Drive 1 or Drive 2) blinks red, then that drive has failed, is not fully connected, or is missing.

- If you're using a RAID 1 configuration and have determined the drive needs replacing, see Section 2.3 for more information on that process.
- If you have determined the drive needs replacing and are using a RAID 0, any data you had stored on the volume is now lost. Replace the bad drive and set (or reset) the RAID mode as described in the prior sections.
- If you have determined the drive needs replacing and are using a SPAN, any data on the good drive will remain intact. Replace the bad drive and set (or reset) the RAID mode as described in the prior sections.
- If you have determined the drive needs replacing and are using Independent mode, any data on the good drive will remain intact. Replace the bad drive and set (or reset) the RAID mode as described in the prior sections.

3.3 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 Mercury Elite Pro Dual with 3-Port Hub 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 Mercury Elite Pro Dual with 3-Port Hub 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.

3.4 Contacting Technical Support



Phone: M–F, 8am–8pm CT
(866) 692-7100 (N. America) | +1 (815) 338-4751 (Int'l)



Email: Answered within 48 hours
www.owc.com/support



Chat: M–F, 8am–8pm, Sat 9am–5pm CT
www.owc.com/support

Changes:

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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.

Warranty:

The Mercury Elite Pro Dual with 3-Port Hub has a [3 Year OWC Limited Warranty](#) if it was bundled with drives. Mercury Elite Pro Dual with 3-Port Hub enclosures that do not ship with drives have a [1 Year OWC Limited Warranty](#). For up-to-date product and warranty information, please visit the [product web page](#).

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