OWC GEMINI

Dual Bay

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INTRODUCTION

1.1 System Requirements

Operating System
- Mac: macOS 10.14 or later
- PC: Windows 10 or later

Hardware
- Mac or PC with Thunderbolt 3

Supported Drives
- Any 3.5-inch or 2.5-inch SATA drive

Supported Flash Media
- Any media card that uses the standard SD form factor

1.2 Package Contents

OWC Gemini

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

- 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.

- 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-

- 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

1.4 OWC Dock Ejector

This application safely ejects all drives connected to the OWC Gemini 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.

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.

4. SD card reader – Connect a compatible, formatted SD card type here.
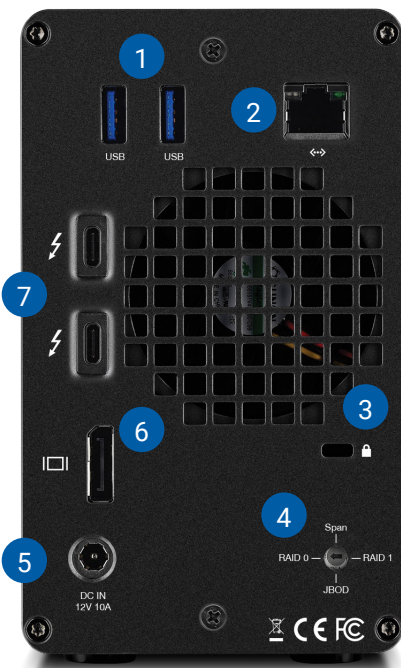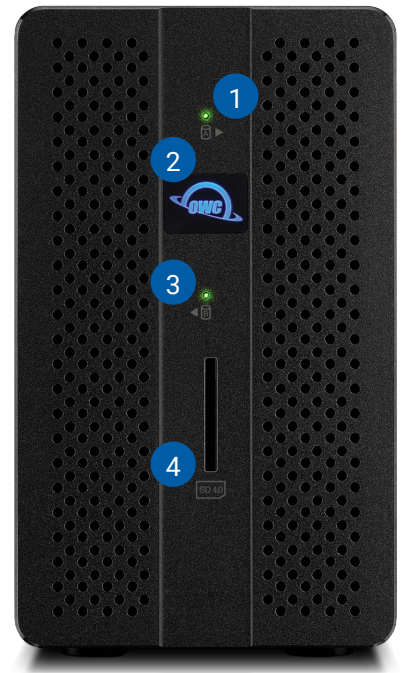
1.6 Rear View

1. USB 3.1 Gen 1 hub ports – Connect bus-powered USB 3.1 Gen 1 devices here.

2. Ethernet port – Left LED will show Green for 10M or 100M connection, Orange for 1G connection; Right LED will show Green for an established link and blink green during network activity.

3. Security slot

4. RAID selector dial (internal access only) – See Sections 2.1 and 2.2 for details.

5. DC IN – connect power adapter here

6. DisplayPort – Connect a DisplayPort display here.

7. Thunderbolt 3 ports – 40Gb/s, 27W Power Delivery to host or 15W Power

1.7 Usage Notes

- Identical drives (model, capacity, firmware) are required for RAID configurations
- If you want to change the RAID mode after the initial setup of the device (it will default to a RAID 0 configuration), you need to first power off the device, disconnect all cables, and then open the device as shown in the Section 2.1. After you have access to the inner-chassis, the RAID mode on the back of the device must be rotated to your chosen setting. NOTE: if there is any data on the drives being used, changing the default RAID mode will result in the loss of all data on the drives once the enclosure powers on and reconfigures itself.
- 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 Dock 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

Follow the steps below to use the OWC Drive Guide utility to format your OWC Gemini. If you are installing your own drives, please skip ahead to the next section.

1. Power on the OWC Gemini and plug it into to your computer with the Thunderbolt 3 cable. If you prefer to use a different formatting utility, do so at this time and skip the rest of these steps.
2. The disk will mount and your operating system will display it as 'OWC SETUP'. Double-click that icon.
3. Within the drive folder, double-click the 'OWC Drive Guide' application.
4. Follow the simple on-screen instructions to complete the formatting process. Once the formatting is finished the drive is ready to use.

2.1 Assembly Steps

This section describes the process of installing your own drives; formatting information is available in Section 3.1. If your Gemini shipped with drives installed, they are pre-configured as a RAID 0; see the steps above for

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, shown below and to the rght
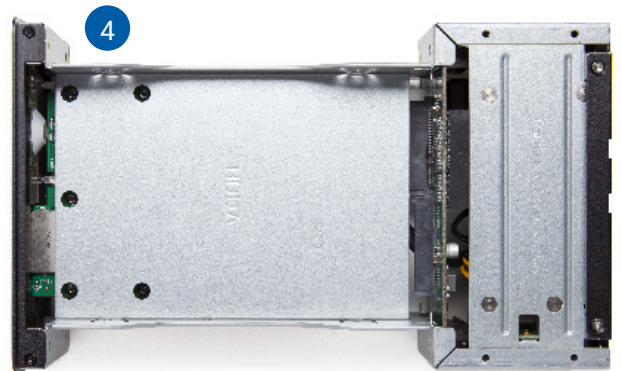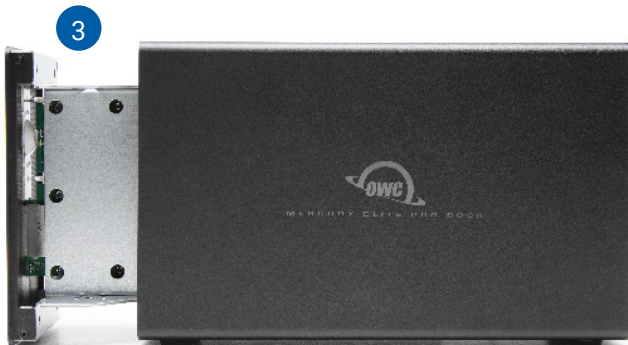
5. Set a 2.5-inch or 3.5-inch SATA drive into the drive housing, then seat the drive on the SATA connector as shown. Minimal force is required.

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 up to configure the drives as a RAID 0 once it is powered on and connected to the host. If you want to use RAID 1, Independent Mode, or span, you must change the setting on the RAID dial on the back of the inner-chassis before proceeding to the next step (turning the dial with a paper clip or flat-head screwdriver, size SL2.5 or SL2, should work). Additionally, if there is data on the drives that were installed in Steps 5-7, choosing any mode other than Independent Mode, will result in that data being lost. For full RAID information see Section 2.2.

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.
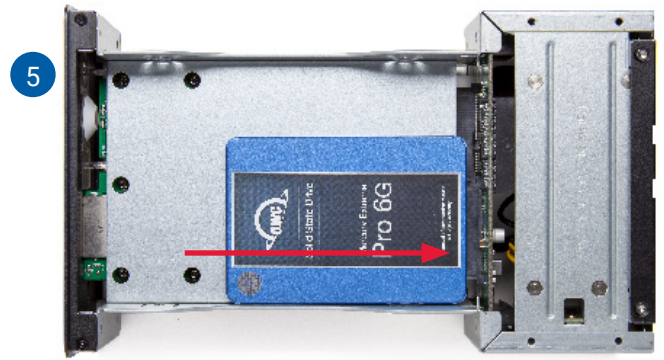
This completes the assembly process.
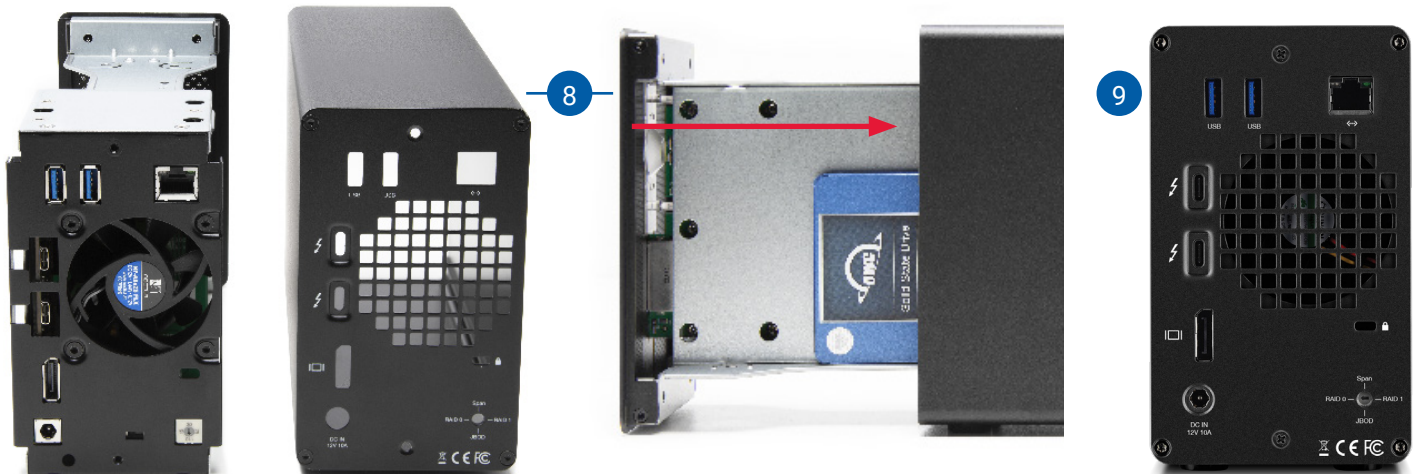
2.2 RAID Settings

Changing the RAID Mode

- The RAID mode is controlled by a dial on the rear of the inner-chassis; see the assembly instructions for information on how to access the inner chassis.
- The dial has four positions, each labeled with a different RAID mode. To change the RAID mode, rotate the RAID dial using a paper clip or flat-head screwdriver (size SL2.5 or SL2 should work) so that the arrow is pointing 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 you can re-assemble the device, then power it on and connect it to the host. At this point the device will reconfigure itself.

> **Warning**   If there is any data on the drives being installed, choosing any mode other than Independent Mode, will result in

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. The total size will depend 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.

2.3 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 OWC Gemini 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 Gemini 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**

> **Note**
>
> The OWC Gemini 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

SUPPORT RESOURCES

3.1 Formatting
For additional formatting information, including instructions on how to format your OWC Gemini for Mac or Windows, go to: www.owcdigital.com/format

3.2 Troubleshooting
Begin by verifying that the power cable is connected to the Gemini 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 ends of the data cable is properly plugged into the computer and the Gemini, respectively.

If you are still having trouble, try connecting a different Thunderbolt 3 cable and see if the Gemini 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 purchased the Gemini as an empty enclosure, or the enclosure shipped with drives installed but is past the three year warranty period, unmount the disk from the OS, power off, then check the cables connected to drive and enclosure. If the Gemini is configured as a RAID 1 and the rebuild LED is blinking, please wait for the rebuild process to complete. If the rebuild LED is still blinking after more than 48 hours, or if you still need assistance for other reasons, please contact our Technical Support team.

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 Gemini 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 Gemini 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 Online Resources
To access our online knowledge base, which includes topics like migrating your data from an old drive to a new one, please visit: www.owcdigital.com/faq

3.5 Contacting Technical Support

Phone: M–F, 8am–5pm Central Time

Email: Answered within 48 hours

Chat: M–F, 8am–8pm Central Time

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 OWC Gemini has a 3 Year OWC Limited Warranty if it was bundled with drives. Gemini 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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