## Introduction

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1.1 Minimum System Requirements

1.1.1 Apple Mac Requirements
• Any Mac with a Thunderbolt™ 3 host port *
• macOS 10.12.1 or later

Note: Mac computers with Thunderbolt or Thunderbolt 2 host ports can connect to the Helios 3 using the Thunderbolt 3 to Thunderbolt 2 adapter from Apple.

1.1.2 PC Requirements
• Any PC with a Thunderbolt 3 host port
• Windows 10 or later
  • (Boot Camp supported)

1.1.3 PCIe Card Drivers
• PCIe card must operate without a driver or have a Thunderbolt-aware driver. Please visit the manufacturer web site for driver information. GPUs not supported.

1.2 Package Contents

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: 32° — 95° F (operating) or -40° — 149° F (non-operating)

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 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 the PCIe card into this drive enclosure. Failure to do so can cause damage to the card and/or the chassis.

Do not attempt to 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 Front View

1. **Power LED** — emits a solid white light when the Mercury Helios 3 is powered on.

1.5 Rear View

1. **DC IN** — connect the included power supply here.

2. **Mini DisplayPort** — connect a compatible display to this port (including displays with a Mini DisplayPort adapter).

3. **Thunderbolt 3 ports** — attach the included Thunderbolt 3 cable to one of these ports. Connect a daisy-chained Thunderbolt 3 device (including a second display) to the other port as needed.
1.4 Usage Notes

- The OWC Mercury Helios 3 is designed to support PCIe cards with the following maximum dimensions:
  - Half Length (HL)
  - Full Height (FH)
  - Double Width (DW)

- The Helios 3 is not compatible with OWC Mercury Accelsior Pro Q SSDs.

- Supports PCIe 3.0 x16 cards (x4 link speed)
  - Backward-compatible with PCIe 2.0 or 1.x cards

- PCIe card must operate without a driver or have a Thunderbolt-aware driver.

- Graphics cards (GPUs) are not supported.

- The auxiliary power connector (mounted on the back of the circuit board, right side), provides up to 30W additional power for cards that require it.

- Supports single or dual display configurations via Thunderbolt 3 and/or mini DisplayPort
  - When using dual displays: supports one display up to 4K @ 60Hz and a second display up to 1080p @ 60Hz
  - Mini DisplayPort does not support DP++. An active adapter is required for use with HDMI and DVI displays.
2.1 Assembly
Please follow the steps below to install a PCIe card in the OWC Mercury Helios 3.

The Helios 3 and your PCIe card are static-sensitive devices. They are susceptible to invisible damage if not protected during installation. For proper grounding, we recommend using a grounding strap. Work in a clean, static-free area, and avoid wearing clothing that retains static charges. Please visit this URL for more information: www.owcdigital.com/anti-static

1. Loosen the thumbscrews on the rear panel until they spin freely. These are captive screws; they cannot be removed.

2. Set the Helios 3 on its side, then grip the front grill and pull the inner-chassis so that it slides out of the outer-enclosure.

3. Set the inner chassis on a working surface, with the rear ports oriented to the left, as shown.
4. Remove the screw (shown at right) which holds the PCIe slot cover in place, then remove the PCIe slot cover and set both items aside. Remove both slot covers if the PCIe card is a double-width card.

5. Install the PCIe card. Line up the connectors on the card with the PCIe slot (highlighted in red), and make sure that the edge of the metal bracket on the PCIe card lines up with the slot in the bottom of the Helios 3. The card shown is an example of a single-width, half-length, half-height card. Your card’s dimensions and appearance may differ.

6. Once the PCIe card is fully seated, the PCIe bracket will sit flush with the opening on the back of the inner-chassis. Take the screw you removed in Step 4 and secure the PCIe card bracket to the Helios 3.
7. Slide the inner-chassis back into the outer-enclosure as shown above.

8. When the inner-chassis is fully seated into the outer-enclosure, tighten the thumbscrews on the rear panel. Press each screw in toward the enclosure, then twist clockwise while still applying pressure. Keep twisting until you feel increased resistance. This completes the assembly process.
3.1 Troubleshooting

Many problems can be traced back to an improperly seated PCIe card or card compatibility issues (such as those which are not supported by the operating systems required by the OWC Mercury Helios 3, or cards which have drivers that are not Thunderbolt 3 aware).

First disconnect the power and any connected data or display cables, then open the Helios and check the seating of the PCIe card. Make sure it sits flush in the PCIe slot. If the card is seated properly, the issue may be related to the Thunderbolt 3 cable. Try using the Helios 3 with a different Thunderbolt 3 cable.

If you’re still having trouble, please contact technical support.

3.2 Contacting Technical Support

Phone: M–F, 8am–5pm CST  
(866) 692-7100 (N. America) | +1 (815) 338-4751 (Int’l)

Chat: M–F, 8am–8pm CST  
www.owcdigital.com/support

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

The OWC Mercury Helios 3 is covered by a 3 Year OWC Limited Warranty. For up-to-date product and warranty information, please visit the product web page.

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