

# ***OWC***

OWC Mercury Helios

ASSEMBLY MANUAL & USER GUIDE



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# INTRODUCTION

## 1.1 MINIMUM SYSTEM REQUIREMENTS

### 1.1.1 Apple® Mac® Requirements

- Thunderbolt™ port, OS X® 10.9 or later

### 1.1.2 PC Requirements

- Thunderbolt port, Windows® 7 or later

**NOTE:** Boot Camp® is not supported. The Thunderbolt certification process does not include Macs running Windows through Boot Camp.

### 1.1.3 Supported PCIe Cards

- Thunderbolt-compatible PCIe cards (see **Section 1.6** for details).

## 1.2 PACKAGE CONTENTS



OWC Mercury  
Helios



Power Supply  
and cable



Thunderbolt cable

## 1.3 ABOUT THIS MANUAL

Firmware, images, and descriptions may vary slightly between this manual and the unit shipped. Functions and features may change depending on the firmware version. Please visit the product webpage for the most recent product specifications.

## 1.4 FRONT VIEW



**1. LED Power Indicator** — This LED illuminates when there is an active data connection between the Helios and the computer. If the Helios is unplugged from power or if the Thunderbolt cable is unplugged, the Helios will power off and the LED power indicator will also turn off.



- 1. PCIe slot cover** — Remove this PCIe slot cover if you are installing a double-width PCIe card in the Helios. Even though the Helios has an extra PCIe slot cover, it does NOT contain two PCIe slots.
- 2. PCIe slot** — Note that there is an opening at the rear of the Helios. This opening lines up with the single PCIe slot inside the Helios, and the opening will be filled by the bracket of the PCIe card that you will install.
- 3. Thunderbolt 2 ports** — Connect the included Thunderbolt cable between one of these ports and another Thunderbolt port on your computer. The other Thunderbolt 2 port can be used to chain additional Thunderbolt devices. Thunderbolt device chains can contain up to six total Thunderbolt devices, and a display can be connected at the end.
- 4. DC power input** — Connect the included 12V DC power supply here.

## 1.6 SPECIFICATIONS

Interface Ports	Two Thunderbolt 2 (20Gb/s) ports
Expansion Slot	One PCIe 2.0 (x16 slot, operates at x4)
Supported PCIe Cards	One half-length (up to 7.75"), full-height, single- or double-width PCIe card up to x16 (operates at x4); Graphics cards are NOT supported
Power to PCIe Card	25W (slot) +75W (supplemental power cable)
Power Adapter	AC Input: 100-240V, ~50-60Hz DC Output: 12V, 10A (120W)
Dimensions	9.17 in. x 5.87 in. x 2.99 in. (23.3 cm x 14.9 cm x 7.6 cm)
Weight (Without PCIe Card)	3.85 lbs. (1.75 kg)
Fan Noise Level	23 dB(A)
Operating Temperatures	41° F to 95° F (5° C to 35° C)
Compliances	CE, FCC

# SYSTEM SETUP



*These are static-sensitive devices. They are susceptible to invisible damage from static electricity if not protected during assembly.*

*We recommend proper grounding by using a grounding strap. Make sure to work in a clean and static-free area, and avoid wearing clothing that retains static charges.*

*For more information, please visit: <http://www.macsales.com/static>*

## 2.1 ASSEMBLY

1. Remove the Helios from its packaging and place it on a soft surface.



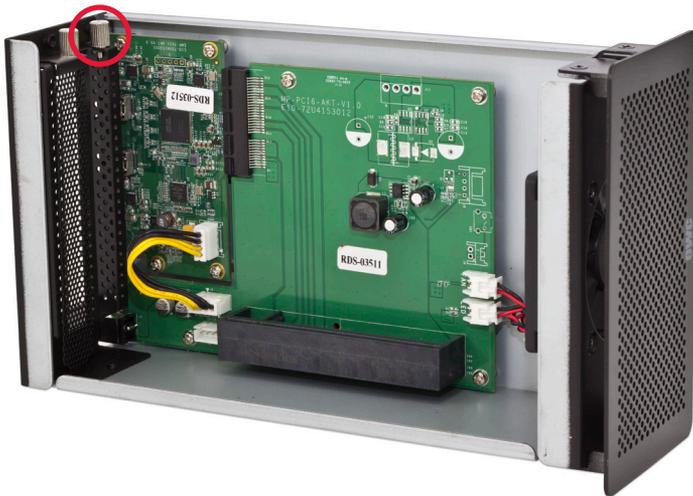
2. Loosen the two thumbscrews at the rear of the Helios enclosure, circled below in red. You can use your hands or a Phillips screwdriver. These are captive screws, so you will not be able to remove them from the enclosure. Simply loosen the screws until they spin freely.



3. Push on the inner chassis at the rear to get the inner chassis to begin sliding out of the outer enclosure, as shown below. When the inner chassis has moved far enough, pull on the front of the inner chassis to remove it fully from the outer enclosure.

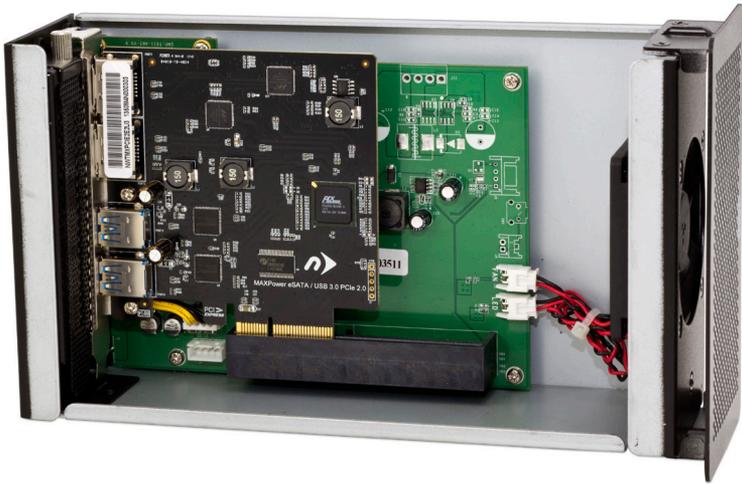


4. Turn the inner chassis so that the PCIe slot is facing up, as shown below. Using your fingers or a Phillips screwdriver, remove the screw from the empty PCIe slot, circled below in red. If you are installing a double-width PCIe card, remove the second screw and lift out the PCIe slot cover. If you are not installing a double-width card, leave the PCIe slot cover in place and proceed to the next step.

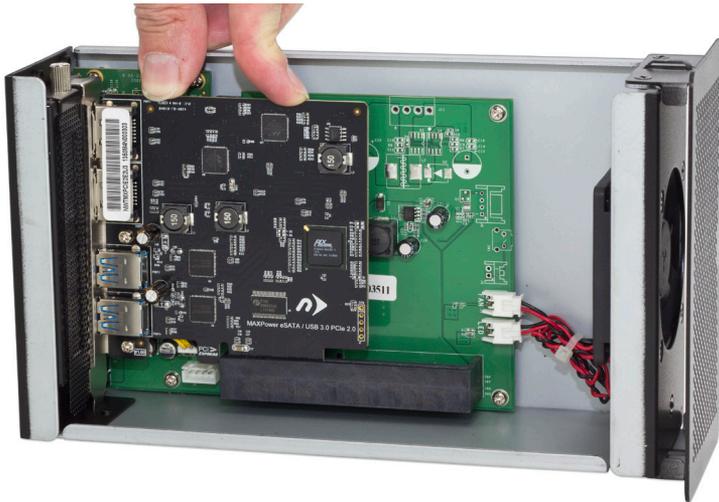


5 Install the PCIe card as shown below. Line up the connectors on the PCIe card with the PCIe slot, and make sure that the edge of the metal bracket on the PCIe card lines up with the slot in the bottom of the Helios.

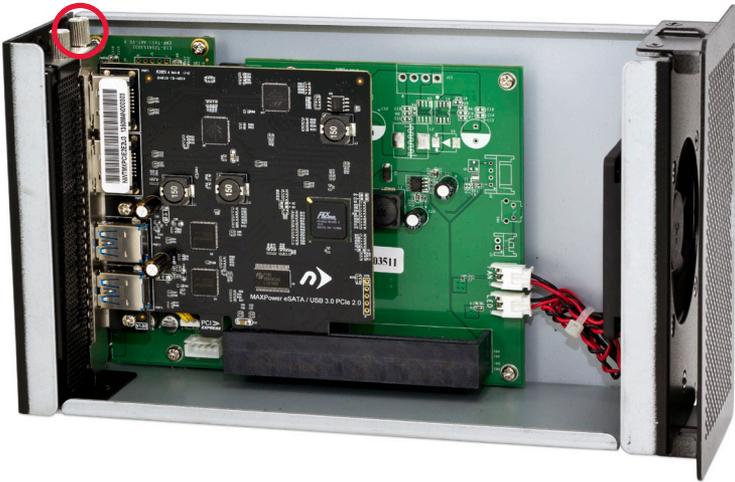
**NOTE:** Handle the PCIe card only by its edges. Do not touch any of the components on the face of the PCIe card or the golden connectors.



6. Press down on the PCIe card to seat the connectors into the PCIe slot in the Helios, as shown below. Press directly down; do not twist or rock the card. If the card does not seat fully, do not force it in. Remove the card, check to make sure that there is no damage to the card or the slot and that the bracket is not bent, then try again.



7. Use the screw(s) that you removed earlier to secure the PCIe card to the inner chassis, as circled below. Do not overtighten the screw(s).



8. Slide the inner chassis back into the outer enclosure as shown below, then turn the Helios so that it is standing on its feet.



9. When the inner chassis is fully seated into the outer enclosure, tighten the thumbscrews on the back of the Helios, circled below in red. Press each screw in toward the enclosure, then twist clockwise while still applying pressure. Keep twisting until you feel increased resistance.



Assembly is now complete. Proceed to **Section 2.2** for information on connecting the Helios to a computer and to other Thunderbolt devices.



## 2.2 CONNECTION

1. Connect the included Thunderbolt cable between the Helios and your computer. If you intend to chain more Thunderbolt devices, connect a cable between the other Thunderbolt port on the Helios and a Thunderbolt port on the device you would like to add to the chain.
2. Make any necessary cable connections to the PCIe cards installed in the Helios.
3. Connect the power adapter to the Helios and into a power outlet.

### NOTES:

- The Helios does not have an on/off switch. As long as the power supply is connected, the Helios will turn on when it receives a data signal through the Thunderbolt cable. If there is no Thunderbolt cable connected, or if the computer is off or in a sleep or hibernation mode, the Helios will turn off.
- Thunderbolt chains can contain up to six total Thunderbolt devices, and a display can be connected at the end.
- Make sure that the installed PCIe card is Thunderbolt compatible, either natively or through a Thunderbolt-compatible driver from the manufacturer.
- Never install a PCIe card while the Helios is connected to power or to a computer. Doing so carries a risk of injury as well as damage to the PCIe card, the Helios, and the computer.

# APPENDIX

## 3.1 TROUBLESHOOTING

**NOTE:** Boot Camp is not supported. The Thunderbolt certification process does not include Macs running Windows through Boot Camp.

Begin your troubleshooting by verifying that the power cable is connected to the Helios and to a power source. If the power cable is connected to a power strip, make sure that the power switch on the strip is turned on. Then, verify that both ends of your Thunderbolt cable are properly plugged into the computer and the Helios.

Try to confirm that the Helios and any installed PCIe cards are seen correctly by the computer. In OS X, go to System Information (click on the Apple logo on the left of the menu bar, hold down the 'Option' key, then select 'System Information'). The Helios will show up under 'Thunderbolt' if it is connected correctly. Any installed PCIe cards will show up under 'PCI Cards'. If you do not see the Helios, try using a different Thunderbolt cable. If you do not see your PCIe card, unplug the Helios and follow the assembly steps in **Section 2.1** to remove and re-install the PCIe card. If you do see the PCIe card in System Information, check the 'Tunnel Compatible' section. If it says 'No', the PCIe card is not currently using a Thunderbolt-compatible driver. Check with the PCIe card manufacturer for a Thunderbolt-compatible driver.

In Windows, you can look at all connected Thunderbolt devices by using the 'Thunderbolt Software' application. Go to the system tray in the task bar and right-click on the Thunderbolt icon, then select 'View Connected Devices'. If connected correctly, the Helios will be displayed in the list. Installed PCIe cards will show up in the appropriate subsection of Device Manager, though there is no way in Device Manager to determine if a PCIe card is using a Thunderbolt-compatible driver.

If your computer does not have the 'Thunderbolt Software' icon in the system tray, go to Device Manager, expand the 'System devices' list, and count how many PCI-to-PCI bridges are listed. Compare the number of these bridges when you have the Helios connected and when the Helios is disconnected. If this number does not change, then the computer is not detecting the Helios. Try using a different Thunderbolt cable. If your computer does not have Thunderbolt 2 ports, hot-swapping may not be reliable in Windows.

If problems persist, consult our online collection of frequently asked questions (<http://www.macsales.com/FAQ>) or see **Section 3.2** for information on contacting OWC technical support.

## 3.2 TECHNICAL SUPPORT HOURS AND CONTACT INFORMATION

8AM - 8PM (CT) Monday - Friday  
9AM - 4PM (CT) Saturday

**Telephone:**

(800) 275-4576 (North America)  
(815) 338-8685 (International)

**Live Chat:**

[www.macsales.com/livechat](http://www.macsales.com/livechat)

**Email:**

[www.macsales.com/ts\\_email](http://www.macsales.com/ts_email)

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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 A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference with radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.

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.

## Health And Safety Precautions:

- Use proper anti-static precautions while performing the installation of your PCIe card into this enclosure. Failure to do so can cause damage to your PCIe card and/or the enclosure.
- Read this user guide carefully and follow the correct procedures when setting up the device.
- 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, contact Other World Computing 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 device, as they may spill into its openings. Doing so increases the risk of electrical shock, short-circuiting, fire or personal injury.

## General Use Precautions:

- To avoid damage, do not expose the device to temperatures outside the range of 5° C to 40° C (41° F to 104° F).
- 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 heavy 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.
- For up-to-date product and warranty information, please visit the product webpage.

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