OWC OWCTB3IVKIT000

OWC ThunderBay 4 Instruction Manual

Model: **OWCTB3IVKIT000** | Brand: **OWC**

Front view of the OWC ThunderBay 4, showcasing its sleek black aluminum chassis and front-facing drive bays.

1. INTRODUCTION

The OWC ThunderBay 4 is a high-performance 4-drive storage solution designed for demanding workflows, offering

exceptional speed and capacity for creative professionals and data enthusiasts. It features dual Thunderbolt 3 ports for versatile connectivity and daisy-chaining capabilities.

Key Features:

- 4-Drive SSD/HDD Storage Solution with Two Thunderbolt 3 Ports
- Up to 1527MB/s sustained performance for rapid data transfer
- Supports 3.5" or 2.5" drives without the need for adapters
- User configurable in RAID 0, 1, 4, 5 & 1+0 for optimized performance or data redundancy
- Ultra-quiet, heat-dissipating aluminum chassis for reliable operation
- Rigorously pre-tested with multi-hour burn-in for assured quality
- Includes Thunderbolt 3 cable

Visual representation of the OWC ThunderBay 4's performance capabilities and storage capacity.

2. SETUP AND INSTALLATION

2.1 Installing Drives

The ThunderBay 4 supports both 3.5-inch and 2.5-inch drives without the need for additional adapters. To install a drive:

1. Unlock the front panel using the provided key and open it.
2. Gently pull out an empty drive tray.
3. Secure your 3.5-inch or 2.5-inch drive to the tray using the provided screws. Ensure the connectors align correctly.
4. Slide the populated drive tray back into the bay until it clicks into place.
5. Repeat for all desired drives.
6. Close and lock the front panel.

Illustration of drives being inserted into the flexible, hot-swappable bays of the ThunderBay 4.

2.2 Connecting to Your Computer

The ThunderBay 4 connects to your computer via Thunderbolt 3. It features a built-in power supply for convenience.

1. Connect the included Thunderbolt 3 cable from one of the ThunderBay 4's Thunderbolt 3 ports to a Thunderbolt 3 port on your computer.
2. Connect the power cable to the ThunderBay 4 and then to a power outlet.
3. Power on the ThunderBay 4 using the power switch located on the rear panel.
4. Your operating system should detect the device. You may need to initialize and format the drives using your system's disk utility (e.g., Disk Utility on macOS, Disk Management on Windows).

Rear view of the ThunderBay 4, highlighting the built-in power supply and Thunderbolt 3 ports for easy connection.

3. OPERATION

3.1 RAID Configuration

The OWC ThunderBay 4 is user-configurable in various RAID modes (RAID 0, 1, 4, 5, and 1+0) to suit your performance and data redundancy needs. RAID configuration is typically managed via software, such as OWC's SoftRAID (not included with the 0GB model) or your operating system's built-in disk management tools.

- **RAID 0 (Striping):** Maximizes performance and capacity by combining drives into a single volume. Offers no data redundancy.
- **RAID 1 (Mirroring):** Provides data redundancy by duplicating data across two drives. Capacity is limited to the size of one drive.
- **RAID 4/5 (Parity):** Offers a balance of performance and data redundancy. Data is striped across drives with parity information for fault tolerance.
- **RAID 1+0 (Striping + Mirroring):** Combines the benefits of RAID 0 and RAID 1 for both performance and

redundancy. Requires a minimum of four drives.

The Most Powerful RAID Tool on the Planet.

SoftRAID is the world's fastest and most flexible application to configure, maintain, and protect your RAID volumes on Mac and PC. OWC enclosures include 3 Years of SoftRAID Premium.
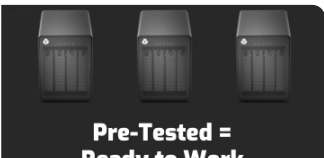
The Cool Quiet Type

You'll work confidently and free of distraction with ThunderBay 4's unique design. Its heat dissipating aluminum housing utilizes "flow-thru" venting, a low-turbulence fan, and a drive-isolating design coupled with vibration-absorbing feet that reduces sonic resonance.

Daisy-Chain Possibilities

With an extra Thunderbolt port, you have an unlimited world of workflow options. Attach a 5K Thunderbolt display or two 4K displays. Place a USB-C device at the end of a daisy chain. With an extra Thunderbolt port, you have the flexibility to add to your daisy-chain and master any task at hand.

Pre-Tested = Ready to Work

We understand having confidence in gear reliability is paramount to creative professionals. That's why every ThunderBay 4 undergoes OWC's multi-hour "burn-in" performance certification prior to shipping. This ensures your ThunderBay 4 arrives operating properly and immediately ready for demanding use.

1. RAID 4/1+0 (10) is available for Mac only at this time
2. Over 1000MB/s read and write real world peak performance in AJA System 4K Test and Blackmagic Disk Speed Test using a ThunderBay 4 with 4 x 20TB HDDs in RAID 0 connected to a MacBook Pro (16-inch, 2019, MacBookPro16,1) with 2.4GHz processor and 64GB RAM.
3. Up to 770MB/s real world peak performance in AJA System 4K Test using a ThunderBay 4 with 4 x 20TB HDDs in RAID 5 connected to either a MacBook Pro (16-inch, 2019, MacBookPro16,1) with 2.4GHz processor and 64GB RAM or a MacBook Pro (16-inch, 2021, MacBookPro18,1) with Apple M1 Pro processor and 16GB RAM
4. Up to 1527MB/sequential read/write performance with 4 x 4.0TB Mercury Extreme Pro 6G SSD in RAID 0 connected to iMac Pro Late 2017 (iMacPro1,1) with 32GB RAM and 3.2GHz processor running AJA System Test (4K-Full resolution, 64GB file size, 10bit RGB codec, single file test)

Table illustrating different RAID configurations, their attributes, maximum capacity, and speed.

3.2 Daisy-Chaining

The dual Thunderbolt 3 ports allow you to daisy-chain up to five additional Thunderbolt devices, including other ThunderBay units, displays, or other peripherals. This expands your workstation capabilities with a single connection to your computer.

The ThunderBay 4 connected in a daisy-chain setup with other Thunderbolt devices, demonstrating its versatility.

3.3 Performance and Workflow

With speeds up to 1527MB/s, the ThunderBay 4 is ideal for high-bandwidth applications such as video editing, audio production, and photo editing. It provides a reliable and fast storage solution for working directly off the drives.

The ThunderBay 4 integrated into a creative workstation, emphasizing its speed for various production tasks.

4. MAINTENANCE

To ensure optimal performance and longevity of your OWC ThunderBay 4, regular maintenance is recommended.

- **Cleaning:** Periodically wipe the exterior of the unit with a soft, dry cloth. Avoid using harsh chemicals or abrasive materials.
- **Ventilation:** Ensure the unit's ventilation grilles are clear of dust and obstructions to maintain proper airflow. The aluminum chassis and ultra-quiet fan are designed for efficient heat dissipation.
- **Drive Health:** Regularly check the health status of your installed drives using your operating system's disk utility or any RAID management software you are using.
- **Firmware Updates:** Check the OWC website for any available firmware updates for your ThunderBay 4 to ensure compatibility and optimal performance.

Close-up of the ThunderBay 4's cooling features, including the fan and ventilation, designed for quiet and efficient operation.

5. TROUBLESHOOTING

If you encounter issues with your OWC ThunderBay 4, refer to the following common troubleshooting steps:

- **Device Not Recognized:**

  - Ensure the Thunderbolt 3 cable is securely connected to both the ThunderBay 4 and your computer.
  - Verify the power cable is connected and the unit is powered on.
  - Try a different Thunderbolt 3 port on your computer or a different Thunderbolt 3 cable.
  - Restart your computer.

- **Drives Not Appearing/Accessible:**

  - Check if the drives are properly seated in their bays.
  - Ensure the drives are initialized and formatted for your operating system using Disk Utility (macOS) or Disk Management (Windows).
  - If using RAID, ensure your RAID software (e.g., SoftRAID) is correctly installed, updated, and configured.

- **Slow Performance:**

  - Verify that you are using a Thunderbolt 3 connection, not a slower USB-C connection.
  - Check the health of your drives. Degraded drives can impact performance.
  - Ensure your computer's drivers and operating system are up to date.

- **SoftRAID Software Issues:**

  - If you receive an error message like "An internal part of the SoftRAID Monitor has stopped functioning properly," try quitting and relaunching the SoftRAID application.
  - Ensure all necessary permissions are granted to the SoftRAID software in your system's privacy settings.
  - Contact OWC support for assistance with SoftRAID licensing or technical issues.

An image representing the SoftRAID software, which is crucial for managing RAID configurations on the ThunderBay 4.

6. SPECIFICATIONS

Feature	Detail
Model Number	OWCTB3IVKIT000
Material	Aluminum
Item Weight	9.46 pounds (4.3 Kilograms)
Product Dimensions	9.6"L x 5.3"W x 7"H (8.27 x 12.99 x 10.24 inches)
Compatible Devices	Desktop (Macs: Intel-based plus the latest Apple Silicon M1/M2/M3 machines and Windows PCs)
Hard Disk Form Factor	3.5 Inches
Max Number of Supported Devices	4 (drives)
Data Transfer Rate	Up to 1527MB/s sustained performance
Hardware Interface	Thunderbolt 3, DisplayPort
Color	Black
Manufacturer	Other World Computing
UPC	810586037129

Perfect in All, for All

Speed, capacity, and configuration flexibility in a compact desktop footprint. ThunderBay 4 is perfection for a myriad of content creators and the reason it's been one of the best-selling RAID storage solutions for the past decade.

Handle it all from everyday file storage and backup to running multi-stream compressed 4K video. Choose a preconfigured solution to start working immediately or add your own HDDs or SSDs to a DIY kit. Configure ThunderBay 4 with SoftRAID XT or your own RAID software to achieve your optimum level of performance and data redundancy. Add additional ThunderBay 4 or other Thunderbolt storage devices to the second Thunderbolt port and flex bigger capacity muscle. In every imaginable way, ThunderBay 4 is perfect in all, for all.

How Much Content You Can Store

	RAID 0 (80TB)	RAID 5 (60TB)
Video: XAVCS/H.265 4K 4:2:2 10-Bit at 4K 23.976fps - 45GB/hour	1778 hours	1333 hours
Video: ProRes 422 HQ 4K at 23.976fps - 396GB/hour	202 hours	152 hours
Video: BRAW 6K DCI At 5:1 compression and 23.976fps - 637GB/hour	125 hours	94 hours

Detailed table showing how much content can be stored based on different RAID configurations and media types.

7. WARRANTY AND SUPPORT

7.1 Limited Warranty

The OWC ThunderBay 4 comes with a **1 Year OWC Limited Warranty**. Please retain your proof of purchase for warranty claims.

7.2 Technical Support

For technical assistance, product inquiries, or warranty service, please contact OWC (Other World Computing) directly. Visit their official website for the most up-to-date contact information and support resources.

OWC (Other World Computing)

www.owcdigital.com/support

Related Documents - OWCTB3IVKIT000

	[OWC ThunderBay 4 Mini Assembly Manual & User Guide](#) Comprehensive assembly manual and user guide for the OWC ThunderBay 4 Mini, detailing system requirements, setup, drive installation, usage notes, software RAID information, troubleshooting, and support contacts.
	[OWC Thunderbolt Go Dock Support Manual](#) Comprehensive support manual for the OWC Thunderbolt Go Dock, detailing system requirements, hardware features, setup, device drivers, management, troubleshooting, and safety precautions.
	[OWC Gemini (1GbE) - Support Manual and User Guide](#) Comprehensive support manual for the OWC Gemini (1GbE) storage solution, covering system requirements, setup, assembly, RAID configuration, device management, software, troubleshooting, and safety precautions.
	[OWC Thunderbolt Pro Dock User Guide](#) User guide for the OWC Thunderbolt Pro Dock, a 10-port professional workflow solution. Details system requirements, connection, ports, drivers, troubleshooting, and support.

[OWC 14-Port Thunderbolt 3 Dock Support Manual | Connectivity and Setup Guide](#)
Comprehensive support manual for the OWC 14-Port Thunderbolt 3 Dock. Learn about system requirements, package contents, port configurations, setup, OWC Innergize software, unmounting drives, troubleshooting, and safety precautions.

[OWC Express 1M2 Support Manual: Setup, Installation, and Usage Guide](#)
Comprehensive support manual for the OWC Express 1M2 NVMe SSD enclosure, covering system requirements, package contents, setup, installation, device management, troubleshooting, and safety precautions.

Documents - OWC – OWCTB3IVKIT000

[pdf] Guide
OWC Storage Comparison Guide HQ TD Synnex Mercury Elite Pro mini Gemini HDD Dual w 3 Port Hub SSD Envoy tdsynnex na us owc sites 78 2023 08 |||
External Storage Solutions Comparison Guide The OWC External Storage Di erence Con dence: Perfor ... ly OWCTB3F1U00000 enclosure only OWCTB38JBKIT0 enclosure only OWCTB38SRKIT0 with SoftRAID **OWCTB3IVKIT000** enclosure only OWCTB3SRKIT0GB with SoftRAID OWCTB3TBV4Txx OWCMEQCTJB000 enclos...
lang:en score:38 filesize: 32.17 M page_count: 7 document date: 2023-07-07

[pdf] User Manual Instructions
OWC ThunderBay 4 Four Bay OWCTB3IVKIT000 Tech America 1069625702 content etilize User Manual |||
OWC ThunderBay 4 with Thunderbolt 3 Support Manual Introduction 1.1 System Requirements Operating System Mac : macOS 10.14 or later Legacy, since June 2024, OWC ThunderBay 4 devices support macOS 10.12 and later PC : Windows 10 or later Hardware Mac or PC with Thunderbolt 3 or later Supported ...
lang:en score:35 filesize: 1.29 M page_count: 21 document date: 2024-10-14