Saved from manuals.plus.
Open the live page for links to other documents and user manuals.

ACASIS H004

ACASIS 40Gbps 4-Bay Hybrid Hard Drive Enclosure User Manual

Model: H004
Brand: ACASIS

1. Product Overview

The ACASIS 4-Bay Hybrid Hard Drive Enclosure is a comprehensive storage solution designed for high-performance data management. It integrates two bays for 3.5-inch or 2.5-inch SATA HDDs/SSDs and two bays for M.2 NVMe SSDs, offering flexible storage configurations and high-speed data transfer capabilities.
This enclosure supports a maximum capacity of 30TB per HDD bay (5Gbps) and 8TB per NVMe SSD bay (20Gbps), allowing for a total unified storage of up to 78TB. It features hardware RAID 1 for HDDs and software RAID 0 for NVMe SSDs, providing options for data mirroring, speed optimization, or large capacity aggregation.
Equipped with a USB4 40Gbps host interface, the enclosure is compatible with USB4 and Thunderbolt 3/4/5 ports, delivering fast data transfers. It also supports 8K@60Hz video output, making it suitable for professional video editing and high-resolution display needs. An active cooling fan and a robust aluminum chassis ensure stable operation and efficient heat dissipation.



Figure 1: ACASIS 4-Bay Hybrid Hard Drive Enclosure showing HDD and NVMe SSD bays, along with rear panel ports including ON/OFF switch, DC 12V power input, HOST (USB-C), RAID SWITCH, DP OUT, and Cooling fan.

2. Setup and Installation

2.1. 3.5-inch Hard Drive Installation

1. Press the HDD tray release button and pull out the tray handle.
2. Rotate to unlock the side fixation bar of the tray.
3. Place the 3.5-inch hard drive into the tray, align it with the fixation posts on both sides, and secure the drive.
4. Insert the tray with the hard drive back into the enclosure until it clicks into place.

2.2. 2.5-inch Hard Drive Installation

1. Place the 2.5-inch hard drive into the tray.
2. Flip the bracket over, align the four holes of the hard drive with the four holes on the bracket, and secure it with screws.
3. Insert the tray with the hard drive back into the enclosure until it clicks into place.

2.3. M.2 SSD Installation

1. Unscrew the bottom screw and remove the bottom cover of the enclosure.
2. Insert the M.2 SSD into the slot, attach the thermal pad, and secure the drive using the provided fixing rubber plug or screw.
3. Replace the bottom cover and tighten the screw.

Your browser does not support the video tag.

Video 1: This video demonstrates the step-by-step process for installing both SSDs and HDDs into the ACASIS H004 enclosure.

3. Operating Instructions

3.1. Connecting the Enclosure

1. Connect the enclosure to your computer's USB4 or Thunderbolt 3/4/5 port using the provided data cable.
2. Plug in the power adapter to the DC 12V port and connect it to a power outlet.
3. Press the power switch to turn on the device.

3.2. RAID Configuration

The ACASIS H004 enclosure supports various RAID modes for both SSDs and HDDs. Use the RAID switch tool located on the rear panel to select the desired mode. **Always back up your data before changing RAID modes, as this process will erase all data on the drives.**

3.2.1. SSD RAID Modes (Software Configurable)

For NVMe SSDs, RAID modes are typically configured via software (e.g., Disk Utility on macOS, Disk Management on Windows) after setting the physical RAID switch to the appropriate position if applicable, or if the enclosure supports software RAID only for NVMe.

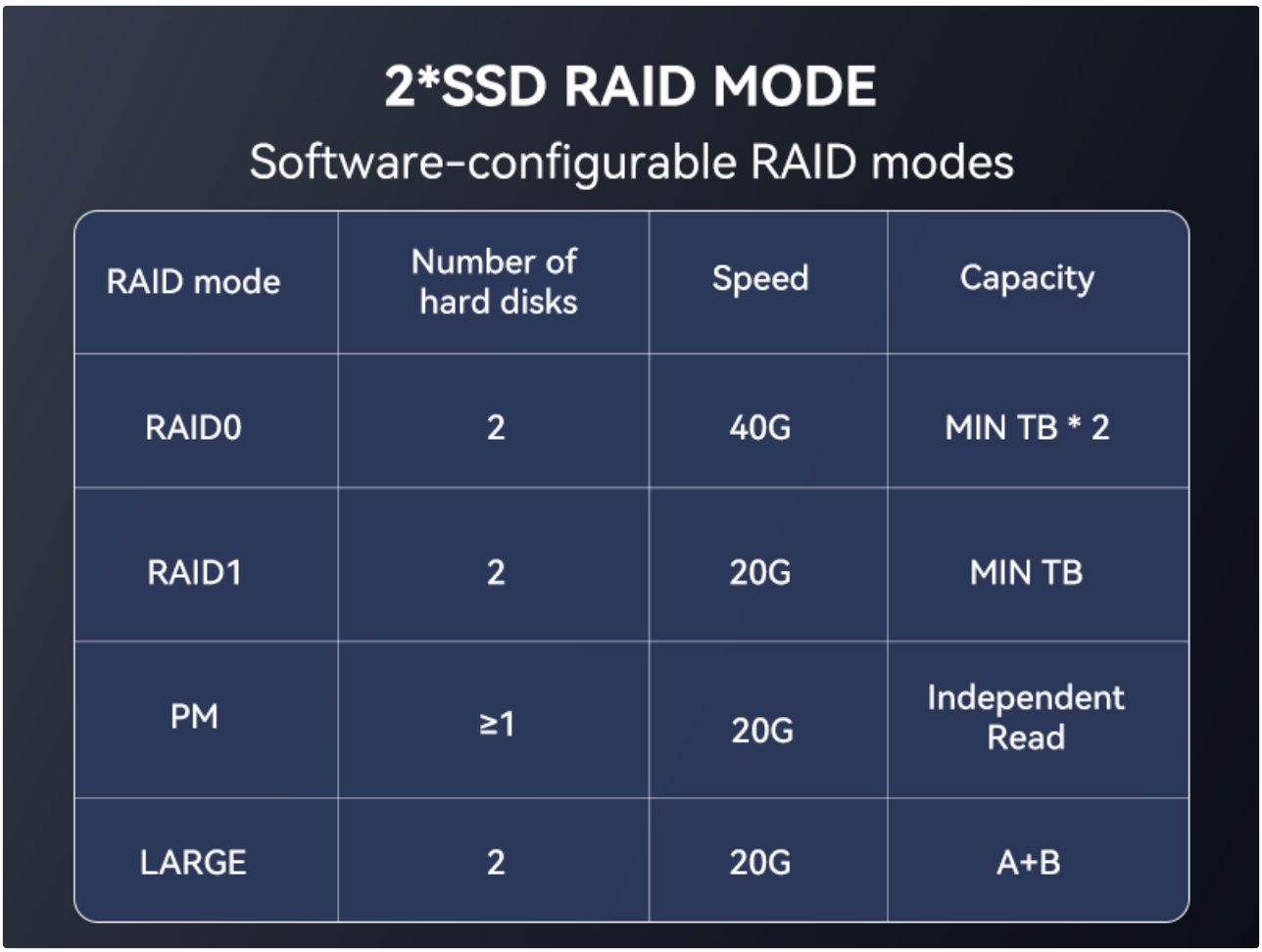

Figure 2: SSD RAID Mode options including RAID0 for 40G speed and MIN TB * 2 capacity, RAID1 for 20G speed and MIN TB capacity, PM for independent read, and LARGE for A+B capacity.

- **RAID 0 (Striping)**: Combines two SSDs for maximum speed (up to 40Gbps). Data is striped across both drives. No data redundancy.
- **RAID 1 (Mirroring)**: Mirrors data across two SSDs for data redundancy. Provides data protection but reduces usable capacity to that of a single drive.
- **PM (Port Multiplier)**: Each SSD operates independently.
- **LARGE**: Combines the capacity of two SSDs into a single large volume (A+B).

Your browser does not support the video tag.

Video 2: This video illustrates the process of configuring SSDs in RAID mode for the ACASIS H004 enclosure.

3.2.2. HDD RAID Modes (Hardware Configurable)

For HDDs, RAID modes are configured using the physical RAID switch on the rear panel of the enclosure. Use the provided RAID switch tool to rotate the dial to the desired setting.



Figure 3: HDD RAID Mode options including RAID0 for 6G speed and MIN TB * 2 capacity, RAID1 for 5G speed and MIN TB capacity, PM for independent read, and LARGE for A+B capacity.

- **RAID 0 (Striping)**: Combines two HDDs for increased speed (up to 6Gbps). Data is striped across both drives. No data redundancy.
- **RAID 1 (Mirroring)**: Mirrors data across two HDDs for data redundancy. Provides data protection but reduces usable capacity to that of a single drive.
- **PM (Port Multiplier)**: Each HDD operates independently.
- **LARGE**: Combines the capacity of two HDDs into a single large volume (A+B).

Your browser does not support the video tag.

Video 3: This video demonstrates how to configure HDDs in RAID mode using the physical RAID switch on the ACASIS H004 enclosure.

Recommendation: For optimal performance and data safety, configure SSDs in RAID 0 for speed and HDDs in RAID 1 for data protection.

3.3. 8K@60Hz Video Output

The enclosure supports 8K@60Hz video output via the DisplayPort (DP) output. Connect a compatible 8K@60Hz monitor to the DP OUT port on the enclosure for high-resolution display. Ensure your monitor supports 8K@60Hz for optimal performance.

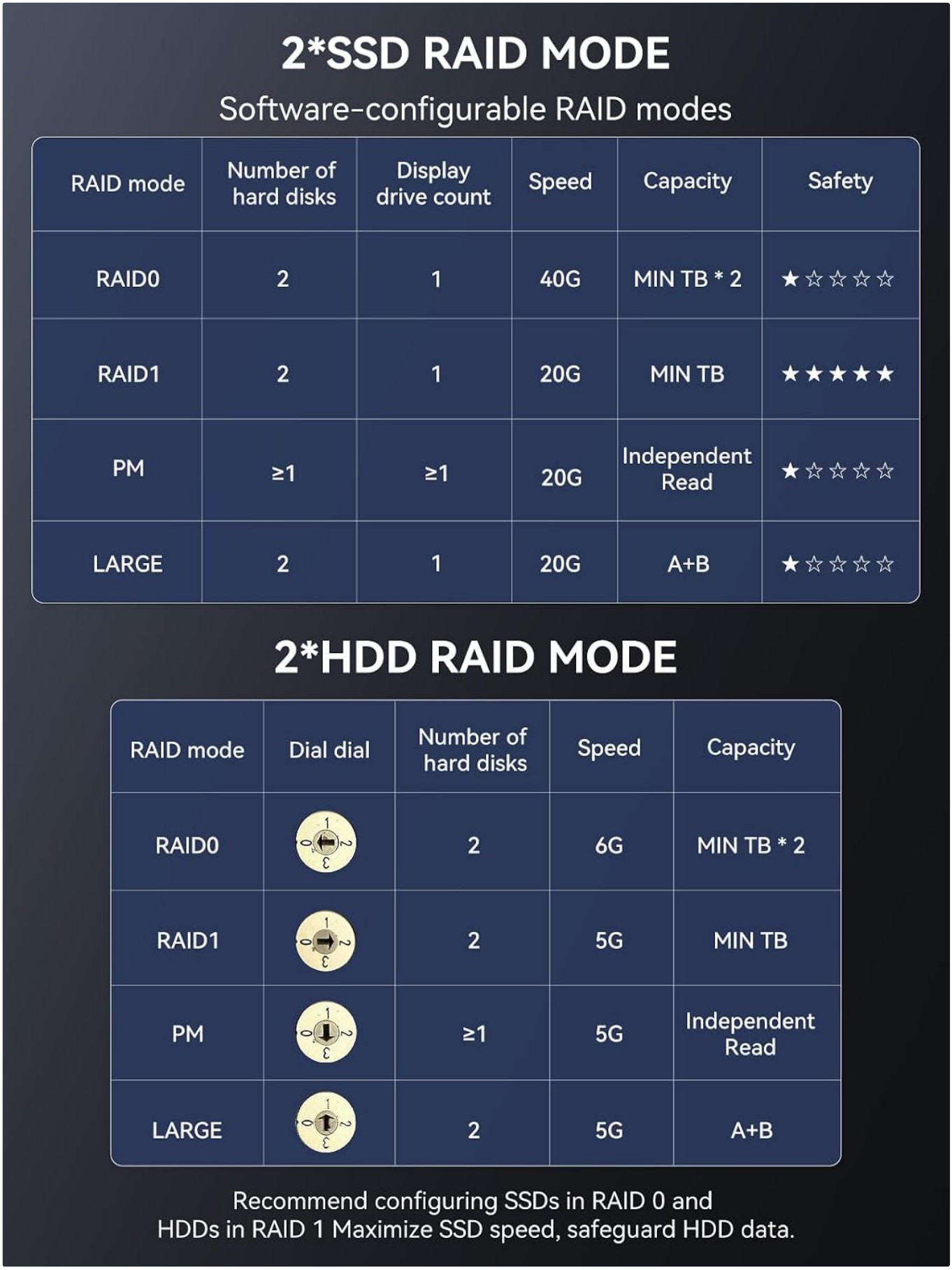

Figure 4: The ACASIS enclosure providing 8K@60Hz video output to an external monitor, enhancing workflow for creative professionals.

4. Maintenance and Indicators

4.1. Active Cooling System

The enclosure features an active cooling fan and an aluminum body designed for efficient heat dissipation. The temperature-controlled fan automatically engages when the internal temperature exceeds 40°C to maintain optimal operating conditions and ensure drive longevity.

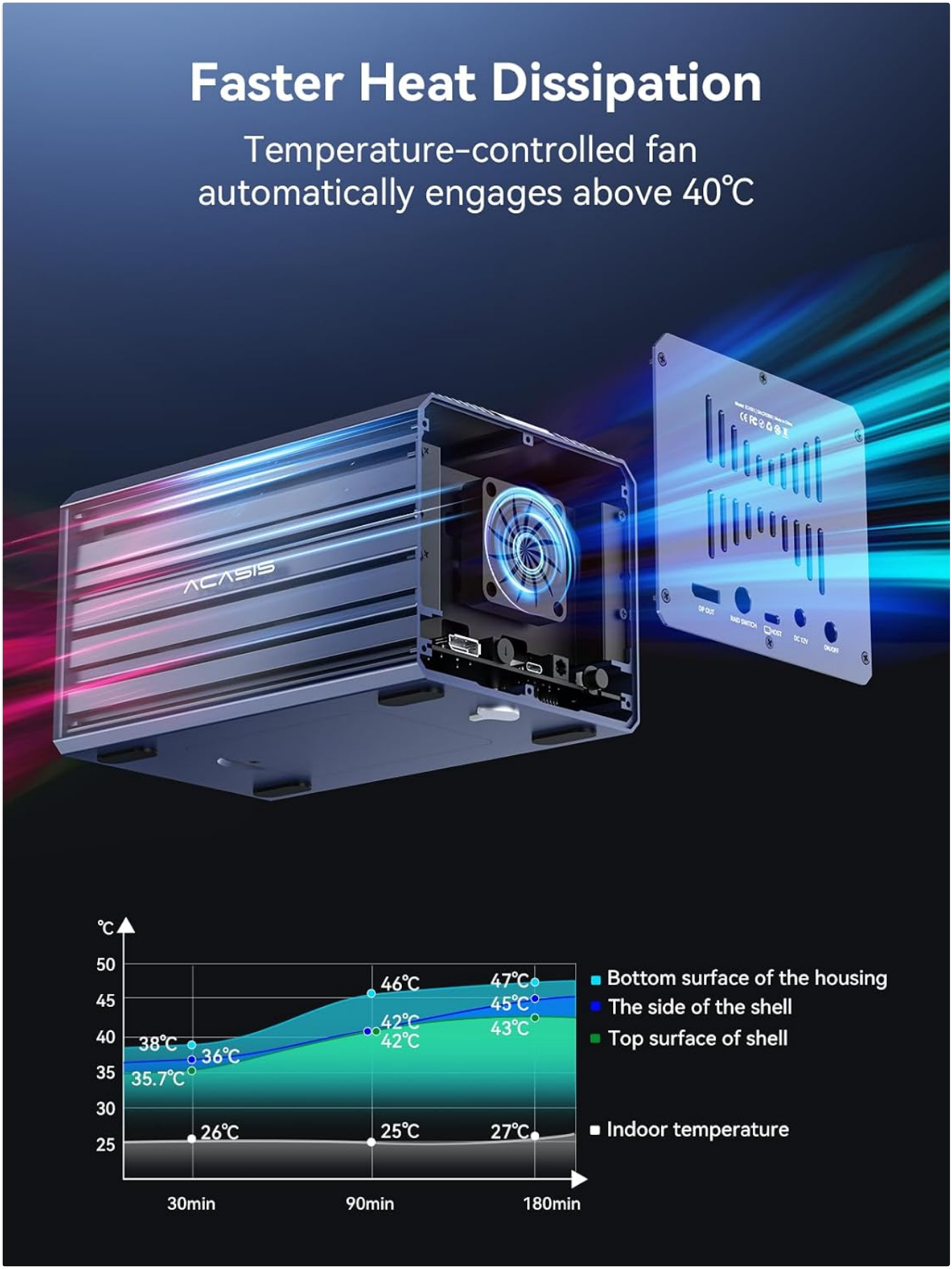

Figure 5: Illustration of the enclosure's active cooling system and a temperature chart demonstrating its effectiveness in maintaining stable temperatures.

4.2. Drive Status Indicators

The front panel of the enclosure includes smart drive status indicators for real-time monitoring of hard drive health and activity:

- **Solid Blue**: Power on, drive access, or backup complete.
- **Flashing Blue**: Reading in progress.
- **Solid Red**: Drive error.
- **Flashing Red & Blue**: RAID 1 data syncing.



Figure 6: Front panel indicators and their meanings for monitoring drive status.

5. Troubleshooting

5.1. General Questions and Answers

- **About ABS Plastic HDD Trays:** The HDD trays are made from high-quality ABS plastic. This material is chosen for its ability to absorb vibration from drives during operation, providing better shock absorption compared to rigid metal trays.
- **Heat & High Temperatures:** The enclosure is built with an aluminum body and an active cooling fan to manage heat under load. If you suspect the fan is not spinning properly, contact support. Ambient room temperature and enclosure placement (ensuring adequate airflow) also affect temperature.
- **Tool-Free Installation & Screws:** For mechanical hard drives, screws provide the most secure mount. HDDs have moving parts and are more sensitive to vibration than SSDs, so screws ensure drives remain stable and connections secure, especially if the enclosure is moved. If you encounter issues with 2.5-inch drive fit, contact support for assistance.

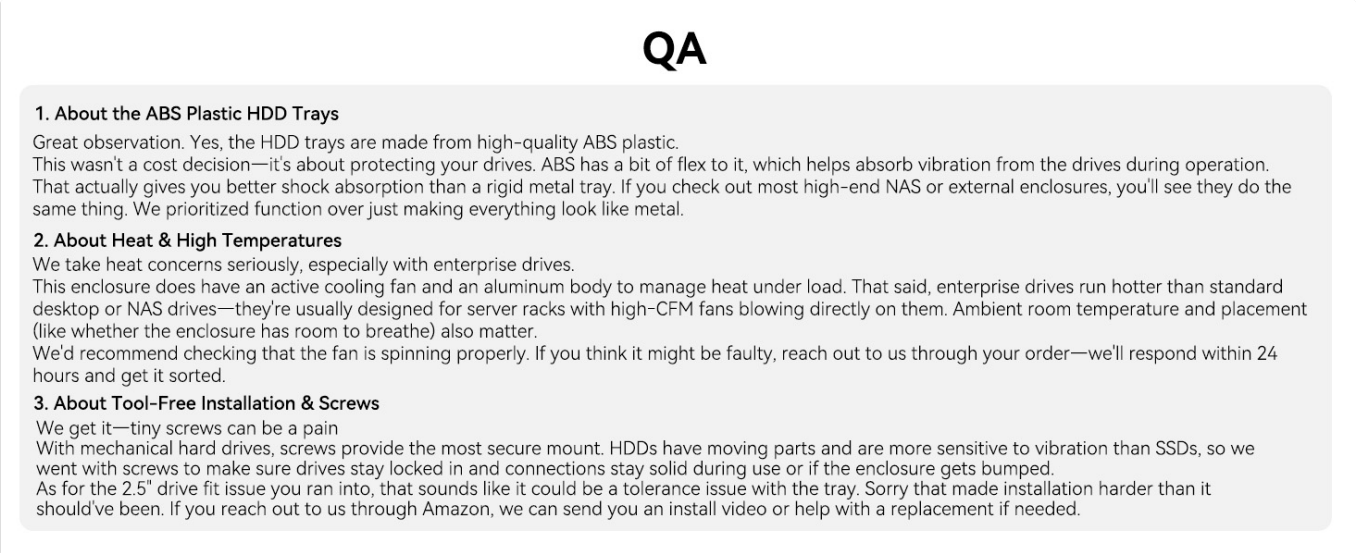

Figure 7: Common questions and answers regarding the enclosure's design and functionality.

6. Specifications

Feature	Detail
Brand	ACASIS
Model	H004
Hardware Interface	USB4, Thunderbolt 3/4/5
Material	Aluminum
Compatible Devices	Desktop, Laptop
Supported Devices Quantity	4 (2x 3.5"/2.5" SATA, 2x M.2 NVMe)
Data Transfer Rate	Up to 40 Gigabits Per Second (with RAID 0 NVMe)
Video Output	8K@60Hz (via DisplayPort)
Power Supply	96W
UPC	686585053817

7. Warranty and Support

7.1. Warranty Information

This ACASIS product comes with a**2-year warranty** from the date of purchase. Please retain your proof of purchase for warranty claims.

7.2. Customer Support

For any questions regarding setup, operation, or troubleshooting, please contact ACASIS Direct US customer support. We aim to respond to all inquiries within 24 hours.
You can typically find contact information on the product packaging, the ACASIS official website, or through your purchase platform.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question

Open the live page

https://manuals.plus/asin/B0GHQ3FV1S

More documents and user manuals: **https://manuals.plus/**