Raidon Technology Launches SR4-B32 4-Bay USB-C Hardware RAID Storage

Supports USB 3.2 Gen 2x2 (20Gb), hardware RAID-5 and 150W internal power, plug-and-play support for Windows, macOS, and Linux.

Raidon Technology, Inc. launches the SR4-B32**,** a 4-bay hardware RAID enclosure engineered for professional workflows that demand data protection and high-bandwidth USB-C connectivity.

It supports **USB 3.2 Gen 2×2 (up to 20Gb)** and connects to **Thunderbolt 3/4 computers via their USB-C ports as a USB storage device**, as well as USB 10Gb/5Gb hosts.

A dedicated hardware RAID controller enables RAID-5 protection (plus BIG, JBOD, and RAID-0). For continuous-duty reliability, the SR4-B32 integrates a 150W internal PSU, active cooling, and hot-swappable, lockable drive trays.

Features:

Interface and Performance:

- **Connectivity:** USB Type-C (USB 3.2 Gen 2×2).

- **Thunderbolt 3/4 Host Use:** Compatible via TB3/TB4 USB-C ports **as a USB storage device.**
- **Link Speed:** Up to **20Gb** (USB 3.2 Gen 2×2); **see FAQ Q7 for link-speed negotiation requirements.**

RAID and Data Protection:

- **Hardware Controller:** RAID logic handled independently of host CPU.
- **Supported Modes:** RAID-0 (Striping), RAID-5 (Parity), JBOD (Independent), BIG (Spanning).
- **Fault Tolerance:** RAID-5 mode maintains data accessibility during a single drive failure.
- **Rebuild Logic:** Automatically initiates rebuild after inserting a replacement drive.

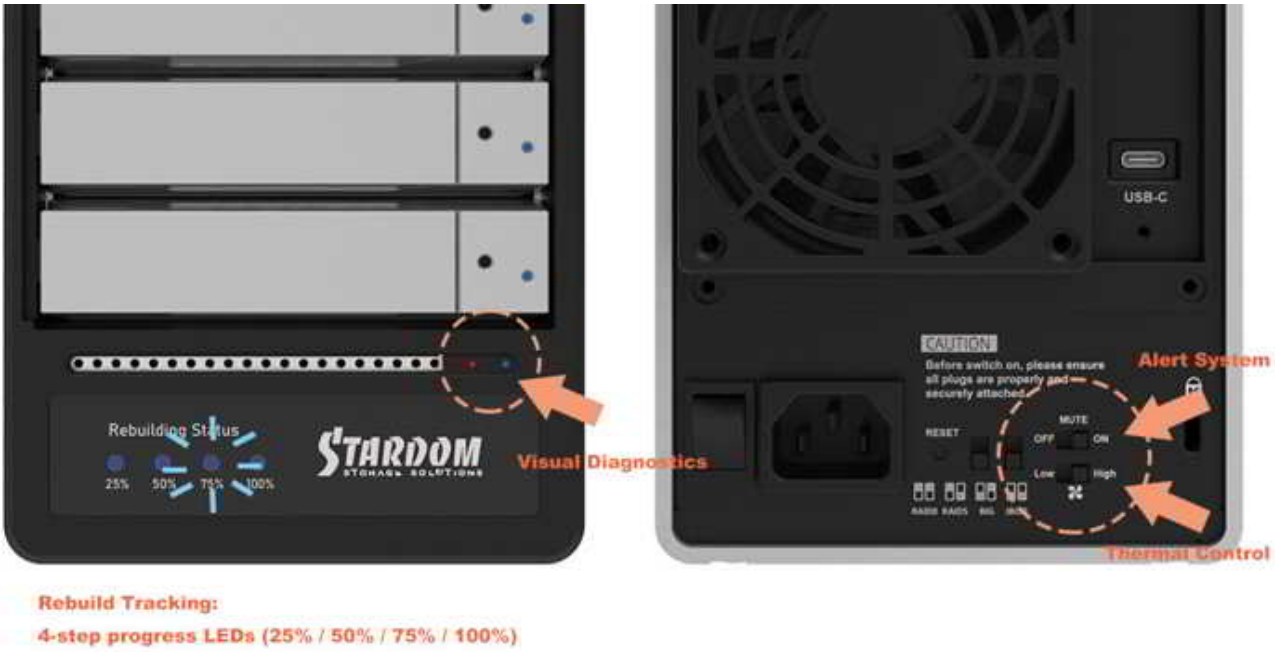
Hardware and Monitoring:

● **Windows Management GUI (Windows only):** Tracks array status, alerts, and rebuild progress; RAID mode is configured via physical hardware controls only.

● **Drive Support:** 4xSATA 3 (6Gb) bays supports 3.5” HDDs and 2.5” HDDs/SSDs.

● **Visual Diagnostics:** LED indicators for Power, Drive Activity, and Drive Failure.

● **Rebuild Tracking:** 4-step progress LEDs (25% / 50% / 75% / 100%).



● **Alert System:** Integrated buzzer for critical errors; includes a physical **Mute (ON/OFF)** switch.

● **Thermal Control:** 80mm cooling fan with a rear-mounted **High/Low speed switch**.

OS and Workflow Compatibility:

● **Desktop OS:** Plug-and-play support for Windows, macOS, and Linux.

● **Mobile Workflow:** Compatible with **Easy Data Vault** for direct backup/restore operations with USB-C iPhone and iPad devices.

Applications:

- **DIT Ingest and Studio Handoff**
  Streamline the field-to-post pipeline. Technicians can ingest footage on-set using **Thunderbolt 3/4 laptops**, then physically transport the unit to the studio to plug into **USB 3.2 Gen 2×2 workstations**.
- **Hybrid Mac and PC Project Drive**
  The ultimate cross-platform bridge. The SR4-B32 acts as a universal project volume that moves seamlessly between **Thunderbolt laptops** (for review/analysis) and **USB-C bench PCs** (for capture/editing). It eliminates the need for network transfers or adapters when exchanging assets between Engineering, Design, and Video teams.
- **Portable RAID-5 'Archive Shuttle'**
  Safely transport massive datasets between office locations without the risk of a single drive failure causing data loss. The array maintains RAID-5 parity during transit; if a drive is damaged, the volume remains accessible in 'degraded mode' and rebuilds automatically once the drive is replaced.
- **4K/8K Video Post-Production**
  A high-throughput solution for video editing, rendering, and proxy generation. Whether serving as the primary project volume for a **docked laptop editing station** or a desktop tower, the SR4-B32 delivers the consistent bandwidth required for high-resolution media workflows.
- **Scientific Research and Analysis**
  Reliable storage for critical data logging. Capture experimental data on a laboratory bench PC, then move the entire enclosure to a Thunderbolt-equipped laptop for analysis. The fault-tolerant design ensures that long-running datasets remain secure throughout the transfer process.
- **Enterprise Backup and Archiving**
  A scalable target for workstation imaging and long-term asset retention. With high capacity and hardware redundancy, the SR4-B32 mitigates the risk of disk failure, making it an ideal local backup destination for small servers and creative workstations.

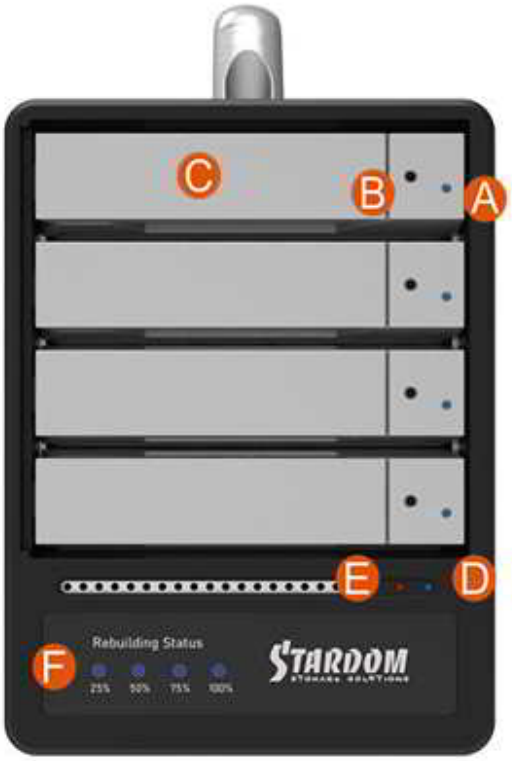
Frequently Asked Questions (FAQ):

Q1: ***How does the SR4-B32 compare with other STARDOM 4-bay storage models?***
A: The **SR4-B32** is the **hardware RAID** option in STARDOM's 4-bay lineup, adding RAID modes (including **RAID-5**) for data protection and sustained workflow continuity. By contrast, **ST4-B31** and **ST4-B32** are **JBOD** enclosures designed for independent-drive expansion (no RAID). For connectivity, all three use USB-C; SR4-B32 can also be used with **Thunderbolt 3/4/5 hosts** when connected as a **USB storage device** (performance follows USB negotiation).

Q2: ***Which RAID modes does the SR4-B32 support?***
A: The SR4-B32 supports **BIG**, **JBOD**, **RAID-0**, and **RAID-5**, allowing you to optimize for capacity aggregation, independent volumes, maximum performance, or parity-based protection.

Q3: ***What happens if a drive fails in RAID-5 mode?***
A: The array enters a **degraded state** but remains **accessible** (read/write performance may be reduced). Replace the failed drive with a compatible drive, and the controller will automatically initiate rebuild to restore redundancy.

Q4: ***What is the maximum transfer speed, and what affects real-world throughput?***
A: SR4-B32 supports **USB 3.2 Gen 2×2 (up to 20Gb)**, but the actual link runs at the **highest USB mode supported end-to-end by the host port/controller, cable, and device** (20/10/5Gb). When used with **Thunderbolt 3/4/5 computers**, it connects **as a USB storage device**, so the same USB negotiation rules apply.



A. HDD Status Indicator LED
B. HDD Tray Key Lock
C. HDD Tray
D. Power Status Indicator
E. System Status Indicator
F. Rebuilding Status Indicator

G. Mute Switch
H. Fan Switch
I. RESET Button
J. RAID Mode Switch
K. Power Switch
L. Power Socket
N. Cooling Fan
M. USB 3.2 Gen 2x2 Type-C Port x 1
O. Kensington Security Slot

Specs:

Model No	**SR4-B32**
Interfaces	USB 3.2 Gen 2×2 Type-C (Up to 20Gb)
Drive Bays	4 × SATA3 6Gb/s
Drive Compatibility	3.5” HDD, 2.5” HDD, 2.5” SSD
RAID Levels	RAID-0, RAID-5, BIG, JBOD

Power Supply	Internal 150W (AC 100–240V, 50-60Hz)
Cooling	80mm Fan (High/Low Speed Switch)
Status Indicators	Power, Drive Activity, Failure, Rebuild Progress
Audible Alarm	Yes (Mute Switch Available)
Enclosure Material	Aluminum / Metal Chassis
OS Support	Windows, macOS, Linux, iOS (iPad/iPhone via USB-C)
Package Contents	• 1x SR4-B32 Enclosure • 1x USB 3.2 Gen 2×2 Type-C to Type-C Cable • 1x Power Cord • 1x Accessory Kit (Drive Screws, Keys) • 1x Quick Installation Guide