

On Set Professional's Guide to Picking the Right Hard Drive

Picking the right storage device for a specific job can be a real pain, but it's integral to designing an efficient workflow. We're here to help you find the right solutions for your needs and break down some best practices that can help keep things on budget, more secure, and on pace.

G-DRIVE mobileSSD™ G-DRIVE mobilePRO SSD™

Perfect For: **Mobile SSD:** Small-Cap Shuttle Drive; Dailies; Backup
Mobile Pro SSD: High-Speed/End of Day/Small-Cap Shuttle; Fast Backup of Day/Small-Cap Shuttle; Fast Backup



IP67 Water/Dust Resistance



Thunderbolt™ 3 Ports

These tough and speedy SSD's are great small capacity shuttle options. The G-DRIVE mobile SSD can match many camera's capture media read speeds, for efficient ingests, offloads, and copies. The Pro version, with speeds in excess of 2,000MB/s, is capable of simultaneously offloading multiple cards. It also makes a great scratch drive for any of the most demanding on/near set applications. Both have an aluminum core that help keep them cool to maintain high performance no matter how long your shoot days are.

Highlights: Mobile SSD: Up to 560MB/s¹ read speeds, Up to 3.5x faster than most portable HDD's⁴ Mobile Pro SSD: Speeds in excess of 2,000MB/s¹; Up to 15x faster than most portable HDD's⁴ Both: Up to 2TB² super-durable design; 5-year limited warranty

ARMORATD™

Perfect For: Budget Backup; Dailies



IP54 Water/Dust Resistance

This is your budget-friendly option that's good for backups or background transfers. It's built to survive on the go shoots or being stuffed in hard shell cases³. As with any typical 2.5" bus-powered drive, it likely can't match your OCF media as an SSD or RAID can, so unless you have more time than budget, this should be your drip backup⁵ that you transfer to throughout the day.

Highlights: Up to 5TB²; rugged durability; 3-year limited warranty

G-RAID™

Perfect For: Small-Cap Master Copy or Backup; Mid-Cap Shuttle; Budget RAID



Thunderbolt™ 3 Ports

The G-RAID™ with Thunderbolt™ 3 device is a broadly versatile option no matter the scale of your production. As a 2-Bay RAID, in RAID 0 you get the speed of both drives for offloads and max capacity for your budget. In RAID 1, the unit can work well as a drip backup⁵, where it gets single drive speeds, but with some added redundancy. The HDMI™ passthrough and dual Thunderbolt™ 3 ports also mean it's a great staple for any workstation or cart.

Highlights: Up to 36TB², RAID 0 or 1, HDMI Passthrough; 5-year limited warranty

G-SPEED™ SHUTTLE

Perfect For: Master Copy; Master Backup; High-Cap Shuttle; General Workhorse



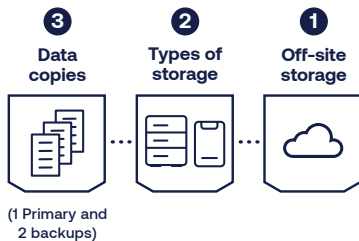
Thunderbolt™ 3 Ports

The G-SPEED Shuttle line provides a scalable and modular family of products to give you the right capacity, speed, and RAID options you need in a 'made to travel' package. These devices can also utilize the ev series of readers and drives to efficiently ingest, consolidate, and export data. Dual Thunderbolt™ 3 interfaces means you can daisy chain a series of systems, and customize an efficient setup to fit almost any production. Just be sure to follow backup best practices and not rely solely on any RAID's redundancy as your 'backup'.

Highlights: Up to 144TB², up to 15x faster than most portable HDD's⁴ 4-Bay (HDD), 8-Bay (HDD), and 8-Bay (SSD) configurations; designed to travel; 5-year limited warranty; multiple RAID options



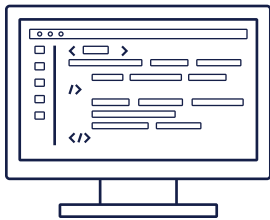
3-2-1: The Gold Standard



The ‘Gold Standard’ for how you protect OCF and other important files is the 3-2-1 Rule: **THREE** copies, one that you work off of and two backup⁵ copies; saved on **TWO** different types of storage (i.e. HDD/SSD, Tape, Server, etc.); **ONE** copy stored in a different location in case of fires, accidents, etc. The key is to have a clear plan and protocol in place with your fellow production members on and off set. You also must confirm receipt and validation of copies before any are wiped and the media reused.

Tip: Designate someone to ‘manage’ the process, and make sure they communicate with everyone handling media prior to production starting. Make sure everyone is aligned.

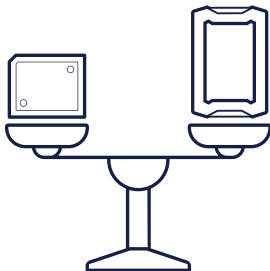
Checksum Before You Wreck Some



If your workflow is not utilizing confidence-based checksums and MHLs (media hash lists), it’s not a professional workflow, full stop. As good as OS based file managers may be, they do not create a verifiable record that your OCF has transferred properly, and completely. These records are necessary when managing OCF, whether multi-million dollar or phone-based productions. There are several industry standard software options to facilitate checksum transfers, without overcomplicating it for you.

Tip: Go to pomfort.com, hedge.video, imagineproducts.com, or yoyotta.com to learn more about their apps.

Find Your Balance of Read and Write Transfer



A common misconception in media workflows is the expectation of how fast your data transfers. Ultimately it is your Capture Media’s listed Read rate in MB/s, matched with an offload drive that has AT LEAST as fast a Write speed in MB/s, that determine whether you’re slowing down your workflow. Two things to be mindful of are; 1. Capture Media readers that slow you down 2. Your interface’s theoretical ‘speed limit’ or ‘cap’ on how fast data moves over it (usually listed in Gb/s). Interface plays a bigger role in multiple offloads.

Tip: Look closely at your read/write speeds, use speed tests, and simple addition and subtraction to make sure you’re not slowing yourself down.

[1] Based on read speed, unless otherwise specified. As used for transfer rate, megabyte per second (MB/s) = one million bytes per second. Performance will vary depending on your hardware and software components and configurations. [2] As used for storage capacity, one gigabyte (GB) = one billion bytes, and one terabyte (TB) = one trillion bytes. Total accessible capacity varies depending on operating environment. For RAID products, storage capacity is based on RAID 0 mode. [3] Shock resistance up to 1.2m on a carpeted concrete floor for 1TB and 2TB capacities, and up to 1m on a carpeted concrete floor for 4TB and 5TB capacities. [4] Based on read speed. Based on internal testing. [5] Always follow backup best practices and do not rely solely on any RAID’s redundancy as your ‘backup’, because a backup is only a copy that exists on a physically separate device.

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