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.

Depending on the demands of your project, either one of these tough and speedy SSD’s work great as a scratch, cache, or shuttle drive. The G-DRIVE Mobile SSD is a perfect base-level working drive with proxies or smaller stream counts. If you require higher speeds, bump to the Pro version for bigger codecs, higher stream counts, or higher resolutions. Both have an aluminum core that help keep them cool to maintain high performance no matter how many notes you get.

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

*Perfect For:* Mobile: 4K Scratch Drive; Small-Cap Shuttle; Backup Mobile Pro: 8K Scratch Drive; High-Speed/Small-Cap Shuttle; Fast Backup

This device is a broadly versatile option in Post; a basic workhorse to edit on, shuttle, or even be your Master Copy. As a 2-Bay RAID, in RAID 0 you get the speed of both drives and max capacity for your budget, the downside is no redundancy. In RAID 1, you get only single drive speeds, and the unit works well for project file(s) and/or media backup¹, with some added redundancy. The HDMI™ passthrough and dual Thunderbolt™ 3 ports means you can connect your external monitor and additional Thunderbolt drives all through one system port.

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

*Perfect For:* Small-Cap Master Copy or Backup; Mid-Cap Shuttle; Fast Backup

The G-SPEED Shuttle (4-Bay) and G-SPEED Shuttle XL (8-Bay) provide a scalable and modular set of products to give you the right capacity, speed, and RAID options you need. These devices can also utilize the ev series of readers and drives to efficiently ingest, consolidate, edit, render, backup, and shuttle data. Dual Thunderbolt™ 3 interfaces means you can daisy chain a series of systems to 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:**
- Shuttle: Up to 72TB²; Up to 1020MB/s; 4-Bay (HDD); Shuttle XL: Up to 144TB²; Up to 16x faster than most portable HDD’s; 8-Bay (HDD)

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

For those that 'need it all' and ‘need it now’. This system has up to 32TB² of usable capacity on RAIDed SSD’s. With its transfer rates up to 2800MB/s, you can move multiple Terabytes in short periods of time and minimize the potential of an upload/download bottleneck. Also, if you need the kind of speed you might find in a post facility setup, but have neither the budget, space nor hardware, this can get you pretty close.

**Highlights:**
- Up to 32TB²; Up to 2800MB/s transfer rate; 8-Bay; Multiple RAID options; 5-year limited warranty

*Perfect For:* High-Speed/Mid-Cap Shuttle; High-Speed RAID; High-Performance Remote Workstations
3-2-1: The Gold Standard

The ‘Gold Standard’ for how you protect your work is the 3-2-1 Rule: THREE copies, one that you work off of, and two backup 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. Know who your best contacts are for every data touchpoint. This applies to on set, editorial, VFX, third-party vendors, etc. Everyone must confirm receipt and validation of copies before any are wiped and the media reused.

Tip: Have a master document that details delivery requirements, formats, methods, and timing, that is shared across all your teams. This becomes a baseline for your workflow and helps keep everyone on the same page.

Maintain the Chain

There are many different roles within the umbrella that is ‘Post’. Regardless of which role is yours, two tools to know that can help with a production’s data security and integrity are MHL’s and file structures. An MHL (Media Hash List), along with corresponding checksums, helps maintain a chain of custody and ensures proper transfer of data at every exchange (easily facilitated with industry software). Your file structure, bins, naming conventions, formats and metadata are also crucially important to establish and communicate. From set through all of post (automated tasks included), ensure everyone is sending and using assets that are the right formats, have the correct attributes, and maintain linkages…it’s never fun to see ‘Media Offline’.

Tip: If not you, then odds are someone on your crew has this experience, or at least knows someone who does. Lean on that experience and don’t repeat other’s mistakes.

This is Not the Shuttle Drive You’re Looking For

Unlike with photochemical film, in the digital age, it’s not immediately apparent that we’re all doing what only a lab used to, which is take the time to make copies or ‘outputs’ of our assets. Time is one of the most precious resources in this industry and is often part of a push/pull with the financial resources that are available. With timelines and budgets only getting tighter, you have to look everywhere for how to save time and money. Using low-performing (often mobile) HDD’s to copy and shuttle assets costs time, which is costing someone money. The added cost to upgrade to faster SSD’s, RAID’s, etc. might quickly be recuperated in the saved time it takes to make copies, both coming and going, again and again.

Tip: Do the math past ‘cost per GB/TB’ when purchasing storage to understand how transfer speeds translate into your cost of labor because of the time it takes to move your data.

[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] Based on read speed. Based on internal testing. [4] 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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