

Gearing Up!

What should I bring with me? What do I need at home?

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Cam's Recommended Gear

Your Computer

If it's not immediately obvious to you, I'm a Mac guy. I prefer the user experience and if there's something I need a PC for, I use a PC for that specific task (or run parallels, or run a cloud based windows system). I've also been using Macs for over 30 years (I started early), so there are some inverted golden handcuffs at play (I pay them).

It used to be that Macs and creative production went hand in hand. All videos were edited in Avid or Final Cut Pro 7 (RIP, or earlier versions). No one used PCs for these tasks. In the late 2000s, Apple dropped Final Cut Pro 7 development and most post-production generalists reluctantly shifted over to Premiere. At that point, most folks got locked into the Adobe ecosystem and are still there. While Final Cut X has it's niche, you can walk into any production company and if you know Premiere, you'll fit in just fine. More and more folks are also using DaVinci as their color suite and NLE, but if you're used to using ADLs and After Effects is integral to your post production tool box, adding in an editor that doesn't support ADL is an efficiency slow-down.

Ok, now that you know that perspective, let's talk about performance.

I want something light, can fit in my backpack, can be used to drive media to several 4k surfaces in a pinch, and renders reasonably quickly. A high-end MacBook Pro with Apple Silicone, for the first time, can out-perform rendering in some use-cases on a high-end Windows machine that is tuned for post-production. Not a lot to offer in terms of AAA gaming, but for work, it's truly a miracle of engineering. The needs for my personal "main whip" are different from the needs of a [media server](#).

If you're going to be doing a lot of renders - for what "kind" of computer to buy, I recommend reading through the info about [rendering](#), as it breaks out performance of analogous specs and what they're good for.

The Windows analog of a high-end Apple silicone laptop is probably a Razor Blade. A step up from there is a custom build from Falcon Northwest. I can recommend both thanks to Kurt Lorey and Jason Batcheller.

Internal Hard Drives

Most folks will do just fine with a 2TB internal M2 or NVME. If you're managing several large-footprint media projects simultaneously and you don't want to delete your itunes media from 2008, you might want an even bigger drive. You can always pinch-hit with external drives and RAIDs, but being nimble and using less things can be a massive time saver. My rule is basically this: buy the biggest you can afford. [Read more about hard drives of all kinds and their use cases.](#)

Processors

You want 8-Core or more for most things except for Web Books, POS, Digital Menus, or Kiosk NUCs. I've worked with 10-Cores that absolutely scream and 16-Cores that are miserable so it's a bit subjective and is very dependent on the RAM and GPU configuration.

- Apple Silicone - good for most things except for software that is based in x64 architecture (pro-tip: probably won't work).
- Intel - good for most things.
- AMD (specifically Threadripper) - great for rendering, especially when paired with high-end NVIDIA cards and lots of RAM.

RAM

Here's a nice breakdown:

- 8GB - Streaming, google docs, spotify - think a step up from a Chrome Book. Good for most people who don't work with computers for their job (or their passion, afterall, I am doing it for the exposure).
- 16GB - Everything 8GB does plus you can run more applications simultaneously and you can run creative software at a very introductory level. Gaming on a Windows machine starts here. Also fine for basic coding things.
- 32GB - The lowest I recommend for anyone working in media production of any kind.
- 64GB - The sweet spot as of 2024 in price vs. performance.
- 96GB - Gimme dat.
- 128GB - Have done this a few times and it's pretty great.
- 192GB+ - Altruistic god-mode.

Your Kit

Every good nerd has a toolbox of gear. Cornelius AKA Projectile Objects (of VIDVOX / VDMX fame) put together a killer guide for VJ touring gear and there's a lot of crossover with my kit. I love to see that Hot Shit all broken out. Check it out [here](#). Very comprehensive.

Before you proceed, I recommend watching this video about "[Every Day Carry](#)" (EDC)

Here are my recommendations.

Base-Line

For All Kinds Of Projects AKA your "Kit"

- A laptop that is good enough to do CAD (like Vectorworks) as well as Post-Production applications (like AE or PR). If you buy for the needs of one use-case, you will likely have a spec that supports the other.
 - Minimum RAM recommended is 32GBs. Minimum HD recommended is 2 TB. Always M2. None of that spinning disk or 2.5" ssd nonsense for your main whip.
- A couple of speedy SSDs. One is useful for quickly shuttling footage around, if you need to - and another drive to use for a video stock library and/or render scratch and/or backup.
- An iPad with a nice library of product user manuals and spec sheets. Also useful for looking at CAD PDFs on-site. Throw those kinds of documents on a cloud service and access it from any device.
- A full-size keyboard or numpad so you can use programs that require it.
- A laser measure tool like a Bosch GLM50C.
- A portable monitor that you can use to test signal on site, or as a second computer monitor, or as an on-camera monitor. Depending on signal type, you can use an on-camera monitor like a Shinobi or SmallHD or FeelWorld, or a traditional portable monitor GeChic.
 - On camera monitors often support HDMI and/or SDi
 - Traditional portable monitors often support HDMI, MiniDisplay Port or HDMI over USB-C.
 - An iPad works in a pinch as a second screen using sidecar on a 2020+ Mac. This sometimes works great, and sometimes doesn't work at all. Depending on WiFi scenario, Mac OS + iPad OS combo. With older devices you can use a third-party application like Duo (which I prefer over sidecar in some ways).
- A multi-tool. I recommend the Leatherman Wave because it has interchangeable bits. Buy the bit extender and all the bits and you now have all the toolbits on your belt and they can work in a Leatherman or a drill! If you know anyone at Leatherman and I can get an

endorsement deal, that'd be cool with me.

- Pro-tip = buy a set of “security” bits. These will allow you to use a drill or your leatherman with projector and display mounting hardware. Just remember to turn that torque way down and finish it up by hand.
- A crescent wrench so you don't strip things with your Leatherman pliers.

Bonus Gear

- A baggy with a nice variety of little headless EDID passthroughs
- A Decimator or other mini signal processor. Decimators come in tons of different flavors. The one linked here is the flagship. Allows you to force signal types! Very useful.
- A second laptop to function as both a backup and as a secondary processor if you need a little extra help rendering – or you need a laptop to run dumb processes while your other computer runs complex processes. A lighter second laptop is recommended, too, so that you can screen share into the heavier boy when you're walking around adjusting corner-pins.
- Cheap dimmable two-color rechargeable LED light bars. I have a ton of these. Great for BoH lighting and will work for video in a pinch.

Adapters, Headless, Cables, Signal Distro

Some adapters have limited or specific resolutions. Look it up first! Active adapters are always better, but often unnecessary. They cost about twice as much as their stupid relatives.

You may also want some signal distribution or signal splitting devices.

- TB3 to TB2
- USB-C to HDMI/DP
- DP to HDMI
- HDMI to SDi / SDi to HDMI
- Headless Passthrough 1920x1080
- Headless Passthrough 1920x1200
- Headless Passthrough 3840x2160
- One or two of those thin 20' HDMI cables that support 4k60
- A shorty SDi cable
- Legacy but sometimes still a thing:
 - MDP to HDMI
 - DP to DVi
 - DVi to HDMI
 - FW 4-Pin to 6-Pin
 - FW 6-Pin to FW800

Documentation & Recording

The biggest mistake you can make is not documenting your work. Even if someone else says they're going to do it, they might not do it well, or capture what you need for the reel or portfolio.

- A camera (besides your phone) that supports interchangeable lenses and that can shoot video and photo
 - A nice all-around lens like a 24-70 or a 16-55 (depending on camera sensor type).
 - A nice wide lens like an 11-16 or 10-24 (depending on sensor)
- A nice, light, tripod with a compact video head
- A gimbal for fun, smooth, walk throughs
- An on-camera monitor to keep things in focus and properly exposed (see monitors above)

Provisioning / Commissioning

Who knows the difference between provisioning and commissioning? Both words seem to be used interchangeably to describe “setting up a device.”

When you first buy a server / computer / device, you should do a first level of provisioning. In this step you need to give the computer a name, set network preferences, and install and license software. You also should use this effort to set the right time-zone and disable all the automatic updates. This is also the point where you install any VNC or screen control software. If you're only setting up unique servers or few server versions, you're done with this effort.

If you have repeatable server setups, after the initial provisioning is done and you've built out a server ISO, remove licenses, load the ISO, and reinstall software and licenses as necessary.