Avoid These Gaming PC Building Mistakes

Over memorial day, I was able to complete a project that I've had in the making since at least last fall: I built a new gaming PC.

My last gaming PC was getting close to six years old, and I realized after upgrading the video card the last time that I was reaching the upper limits of my rig's potential.

I'd put a new 1 TB solid state drive in it just last year, and I'd upgraded from a GTX 970 to a GTX 1080 not too long before, but I discovered that my aging quad-core Intel I5-4460 had become a performance bottleneck.

> The good news is that while you probably can't afford all of the absolute top-of-the-line components, you almost definitely don't **need** them.

The PC has always been my personal favorite platform to game on, and I've built three of them myself. I'm not a pro by any means, but I'm also starting to feel a little more confident in the whole process, and I'm really happy with how this build turned out.

Of course, the reason I'm beginning to feel more confident is because I've made *a lot* of mistakes building PCs over the years.

If you've ever considered building your own gaming PC, you should absolutely do it! It's a fun and extremely fulfilling project that also can save you money or help you get more bang for your proverbial buck if you were planning to buy a pre-built gaming machine.

And if and when you're ready to get started, take a look at some of the gaming mistakes I've made so that you can avoid them yourself. I promise I'll be able to save you some time and headaches if you do.

Don't: Break the bank

Do: Set and stick to a budget

When it comes to building a gaming PC, the sky truly is the limit on cost and performance. A quick internet search will turn up build guides for virtually any budget, including multi-GPU monstrosities that can set you back well over $10k.

Of course, there's a threshold where the dollar-to-performance ratio drops off dramatically, and you have to remember that.

The first time I built a PC, I was newly married and not yet done with school. We had very little money, and I was discouraged that I wouldn't be able to afford anything worthwhile.

The good news is that while you probably can't afford all of the absolute top-of-the-line components, you almost definitely don't **need** them.

Many of my new components laid out

Now that we're living in a post-Ryzen world, you can build a pretty sweet gaming PC for less than $1000, an even better one for less than $2000, something even better for less than $3000, and… well, you see where I'm going with this.

Start by looking at the recommended specifications of some of the games you want to play, and then search for build guides for systems that meet or exceed those requirements. My favorite resource for this is PCPartPicker.com.

Do some research, and set a budget that makes sense for you. And then, more importantly, **stick to it**.

You're going to be tempted to opt for the tier up for some of your components, and you can (probably) do that. But if you're not strict with your budget, this build's gonna get away from you cost-wise.

Don't: Wing it as you order parts

Do: Make a parts list and plan ahead

If this is your first gaming PC build, you might think you can just hop on over to Amazon and browse for whatever parts look like they'll meet your budget and

needs.

Building gaming PCs is easier now than ever, but there are still compatibility issues that you need to be aware of when you're ordering your parts: certain CPUs are only compatible with proper motherboards, memory comes in various standards, and so forth.

When I built my first rig, I attempted to make sure all my parts were compatible by cross-checking each one's technical specs on Newegg. Everything eventually turned out okay, but after a massive (and unrelated) hardware failure, I discovered from a support rep that I was technically using overclocked memory for my motherboard.

He was, thankfully, willing to look the other way when it came time to file an RMA (a return request for the faulty component).

Today, there are resources that make this process way, ways easier. Once again, head to PCPartsPicker.com and use their System Builder tool.

> Your money may be burning a hole in your pocket, but trust me on this: you want to do some research first and wait a few days at least before you order.

This incredible app will let you virtually build your new gaming PC piece by piece, **and** it will tell you if there's a compatibility issue detected in your parts. It'll even give you an estimated power requirement so you can see how big of a power supply unit to buy.

Best of all, the tool will estimate the cost of your build, so you can ensure that you're staying within your budget–you did read our first tip, right?

Build a parts list that looks good to you and save it. If you want, you can even convert that list to a wishlist on Newegg, Amazon, or wherever else you want to buy your components so that you can watch for deals on your components as they crop up.

Invariably, I'll end up deviating somewhat from my original parts lists, but that's okay. Once I've made a list, I can more clearly see where I want to flex a bit and what kind of room I have in my budget to do that.

Dont: Order everything right away

Do: Be patient and order everything when the time is right

With gaming PCs, technology changes quickly. Your money may be burning a hole in your pocket, but trust me on this: you want to do some research first and wait a few days at least before you order.

With this most recent build, I failed to heed my own advice, and it nearly cost me. I'd finally saved up enough money to order the parts I wanted, and I was eager to build it as quickly as possible.

I began reading rumors that Intel was preparing to release their 10th gen CPU lineup, but I managed to convince myself that I simply couldn't wait that long.

Within a week of placing my order, Intel rolled out their new lineup, and the cost was nearly identical to what I'd already paid.

Fortunately, I was able to return the CPU I'd received already and cancel my motherboard order, and I ultimately nabbed myself a shiny, new I9-10900k CPU.

That said, AMD's set to make some major announcements in the near future, and we're expecting new Nvidia graphics cards to be unveiled sometime this summer, which brings me to my next tip…

Don't: Wait forever

Do: Order when you're ready

There's always going to be better hardware around the corner, and that can absolutely paralyze any potential build you might be dreaming up.

Join communities like the Intel, AMD, or Nvidia subreddits, and get a sense for one major hardware is expected to hit. If you're in a position to wait until the next major release, go ahead and do it.

> Eagerness can actually work against you and lead to self-imposed stress about the project. You're way more likely to make mistakes under that kind of pressure.

But if you don't have access to games you're ready to play right now, or if your current rig is really bringing you down, waiting might mean a lot of potential game time you could be missing out on. Pull that trigger.

Also, be aware that certain companies, like EVGA, offer step-up programs that will allow you to upgrade a current gen GPU for a next gen–or even upgrade within a single gen–so long as you file a request within several months of your purchase.

Dont: Expect to build your PC in less than an hour

Do: Set aside several hours or even days to complete your build

Once you have all your components ready to go, you're probably going to be itching to put them together and actually start gaming.

That eagerness can actually work against you and lead to self-imposed stress about the project. You're way more likely to make mistakes under that kind of pressure.

I'm a bit embarrassed to admit it, but my latest PC build took me more than 8 hours to complete overall.

I was utterly meticulous as I put it together, and I was dealing with components I'd never worked with before, namely a self-contained liquid cooler for my CPU.

Chaos before order

The one I built before this took me significantly less time, but I was also never happy with how my cable management turned out.

And the first time I built? Well, once you factored in all the mistakes I'd made and the number of times I had to strip down and rebuild the machine, it took me significantly longer.

That was an experience I was determined not to repeat, so I set aside myself an entire day I knew I'd have to myself, made sure to take breaks throughout, and I

even left at least one minor problem I encountered until the next morning.

Don't: Wait to plug your gaming PC in until literally everything's connected

Do: Test your CPU once you're able

The first PC I ever attempted to build literally went up in smoke. It was a giant pain in the butt that ultimately cost me a lot of time.

That pain was exacerbated by the fact that I didn't actually test any of my components until I'd literally built everything. I could have saved myself at least a bit of time by following this one tip.

Now, I like to wait until the motherboard is mounted to my case and the CPU is connected to its fan or cooler and the PSU. Fire it up and at least make sure those all work as expected.

My current motherboard has a little LED display that'll give me an error code for various hardware failures, so I theoretically could have detected a faulty CPU right from the get go and taken everything down to send back to the manufacturer without wasting more time on the build.

Thankfully, I didn't have to worry about it this time around.

Don't: Leave cable management as an afterthought

Do: Leave it as the absolute last step before you close the case

Part of the reason this current gaming PC took me so long to build was that I was really committed to the idea of keeping it as clean and cable free (at least where people could see into the case) as possible.

As a result, I made sure that I knew exactly where I was going to hide each of my components cables and wires as I started assembling them.

My mistake this time, however, was that I wasted way too much time actively zip tying those cables before I was even ready to close the case up, and that meant I had to eventually undo all my work and start over basically from scratch.

> Have a game in mind that you've been dying to play for the first time or dying to see on ultra settings (or whatever), and start playing it **as soon as you're able**.

Remember that one minor problem I left over until the morning after my build? I discovered I'd connected two of my case fans to the wrong parts of the motherboard, and they were spinning at full velocity.

It sounded like a jet engine in my house.

To make matters worse, I discovered I'd installed one fan upside down, and I had to pull it out completely to flip it around, unraveling most of my carefully hidden RGB cables in the process.

If I'd instead waited to zip tie and hide all of those cables until after I'd ensured everything was working as expected, I would probably have saved myself at least an hour of wasted time.

Oh, let's go ahead and just make this one an official tip.

Don't: Install your case fan in upside down

Do: Check the orientation of all fans before mounting them to the case

I felt real dumb when I found that one of my exhaust fans was actually blowing hot air back *into* my case. And I felt even dumber when I realized why I'd made the mistake.

My fans are from Corsair, who imprints two arrows on the chassis of each indicating the direction they direct airflow. Rather than paying heed to those, however, I oriented the fans according to the Corsair label on the center of each.

It's literally just a sticker with their logo on it. And it turned out those labels were not consistent with one another.

Don't: Let tinkering become an obsession

Do: Start playing games on your new **gaming PC** as soon as possible

Once you more-or-less know your way around PC hardware, you'll find it's very easy to obsess over all the little improvements you can make here or there.

You might tweak a fan's settings to make it quieter, or you might overclock your components to try to squeeze a little more performance out of them. You might obsess over a cable that's hanging down just slightly farther than you'd like or a screw that might seem ever so slightly too loose.

These things matter, but it's really easy to lose sight of what's actually important here. Tinker too much, and you can drive yourself crazy.

Instead, remember that this is a long-term investment, and you're going to have plenty of time to tinker and tweak as you see fit over the coming years.

Have a game in mind that you've been dying to play for the first time or dying to see on ultra settings (or whatever), and start playing it **as soon as you're able**.

That's where the real fun of this whole process comes in, and trust me, that's when you're going to feel the most proud of your accomplishment in building your gaming PC.

And strongly consider shutting off the FPS counter, at least for the time being. There will be time to benchmark your PC's performance later.

For now, just revel in enjoying your first game on your new, custom-built gaming PC.

The Witcher 3 on Ultra – my first screenshot on my new PC