Basics on Choosing a Professional Gaming Monitor

As gaming and eSports have grown, a monitor with specific advantages for gaming is now a key part of any eSports player's equipment list. Here are some of the key questions competitors ask when choosing a top quality professional gaming monitor.

What is the right resolution?

Nearly all 24" gaming monitors have a resolution of 1920x1080 to match TV outputs for consoles – and provide high resolution for PC monitor play.

Should I go with a 60 Hz or 120Hz monitor?

It depends on what you like to play. Most dedicated eSports players narrow down the games they compete on to a single class of games such as First Person Shooters (FPS) or Real Time Strategy (RTS), then build their system around their preferred platform and the game's video output. For example, eSport players on the FPS game CounterStrike typically consider a top quality 120Hz monitor to be essential at the higher levels of competition. However, dedicated RTS players who compete on StarCraft usually prefer a 60Hz monitor, since that is what the game's native video output will be. If you are playing on an Xbox or PlayStation, these are usually played on 60 Hz monitors in the tournaments.

What about response time and lag time?

For gamers looking to compete in high paying tournaments, the key is to practice on what you are going to play in the tournament. This is especially the case for fighting games and shooters where reaction time is critical and developing precise timing is essential. These performance factors are controlled by the gaming monitor's response time and lag time.

Monitor Response Time

This is typically measured in Grey to Grey (GTG) response time on the monitor specifications. Current gaming monitors feature 2ms GTG response time, which has been the standard for the last two years.

Input Lag Time

Input lag time refers to the internal processing of the picture by the LCD panel. This is a feature not found on past spec sheets, since the CRT monitor is a "dumb" device with no lag time. However, the LCD panel has to manipulate digital images, so the processing time will vary from monitor to monitor. The difference is barely noticeable for the average gamer, but becomes an important component of timing for high level eSports competition. All gaming monitors feature lower lag times than traditional LCD monitors, but they do vary from model to model. Many gamers take their cue from the big money tournaments such as Major League Gaming (MLG), which evaluate features for competitive play and test them on the various platforms used.

Do I need NVidia 3D Compatibility?

Depending on the game, eSports players either care a great deal about 3D or not at all. Games such as StarCraft II don't use 3D, while games such as Call of Duty use it extensively. Due to the large amounts of practice they put in, most professional gamers practice and compete in 2D and then use 3D for fun. Because 3D requires both glasses and the emitter to control them, there are two versions of gaming monitors that can play games in 3D using the NVidia system. Compatible 120 Hz Gaming Monitors

These monitors are designed to provide smooth 120Hz frame rates, and also are capable of playing 3D games with a 3D emitter and glasses. The emitter and glasses are usually sold separately and are attached to the monitor only when you are playing 3D games. If you currently have little or no interest in playing 3D games, these monitors give you the option to play 3D in the future without paying extra for the equipment now.

Purpose Built NVidia 3D Monitors

These monitors are extensions of the compatible monitors and include:

1) HDMI 1.4 interfaces that enable you to play 3D on console and PC platforms,
2) integrated emitters for the glasses, and
3) a pair of glasses in the box.
4) The advantage of these monitors is that everything is included, and there are no extra parts or wires on your desk. Of course they are more expensive, but they let you have the best of both worlds – great 2D and 3D 120Hz play.

Other monitor features

While most popular gaming monitors tend to have the features just discussed, the best monitors have special technology that is designed around the needs of professional gamers. You can find links below to see what features have been developed around your favorite platform, but here are some of the features to look for on a professional gaming monitor:

- LED lighting – a must for professional monitor color rendering
- Black equalization – the ability to manipulate the color map to peer into dark areas
- Smart scaling – the ability to shrink the screen to an optimal size for competition
- Monitor setup switches – mouse-like devices that enable you to quickly manipulate or change from one monitor setting to the other
- Special color modes – the ability to download or customize colors that are optimized for the gaming platform or map you are playing

What's your game? Here's your monitor.

Read more about choosing the best monitor for your platform:

Choosing a Pro Gaming Monitor for CounterStrike and other fast action games

Choosing a Pro Gaming Monitor for StarCraft II/League of Legends and other RTS games

Why just play when you can conQuer?