



Gaming Glasses – Are Glasses with Blue Light Filters a Good Idea for Gamers?

Today's market offers an ever-growing selection of special glasses that come with an integrated blue light filter promising to protect gamers' eyes while playing video games on their computers. Designed to curb eye fatigue, these glasses should enable gamers to concentrate better while playing and focus on the action. But are such gaming glasses beneficial, what advantages do they offer, and what do they actually do?



Video games and professional esports, or competitive video games, are one of the biggest entertainment phenomena of the 21st century. The German games market alone recorded a significant jump in sales in the previous year of 2020, with video games generating total sales of around 8.5 billion euros in the year of coronavirus.

This corresponds to an increase of 32 percent over the previous year.¹ In other words, video games are in greater demand than ever. And it is the players' eyes that are really under a constant barrage while gaming, which is why various manufacturers are responding by developing glasses for gamers. In most cases, these are special glasses intended to counteract the negative impacts that monitors – and especially computer screens – are thought to have on the eyes.

According to the information provided by manufacturers, the special glasses are designed to “protect” against blue light. Yet, studies have not provided any specific information demonstrating that the blue light emitted by screens presents a health risk for the retina. According to all scientific and medical insights currently available, we have “all clear” in terms of acute eye damage. Nonetheless, prolonged exposure for hours on end can also negatively impact visual comfort and quality, and such individuals frequently report asthenopic symptoms, stress, eye strain, and visual discomfort. Excessive gaming into the evening and nighttime can also disturb sleep-wake cycles and thus negatively impact well-being and overall health in general.

¹ Cf. game – the German Games Industry Association (2021): Clear increase in the Covid-19 year: German games market grows by 32 per cent, [game.de/en/clear-increase-in-the-covid-19-year-german-games-market-grows-by-32-per-cent/](https://www.game.de/en/clear-increase-in-the-covid-19-year-german-games-market-grows-by-32-per-cent/)



As someone who uses computers for extended periods, what can I do to relieve my eyes and prevent increased strain?

We are well recommended to create an environment that reduces external challenges to our visual system. First, the room should be sufficiently illuminated, either with daylight or artificial light. Frequent changes in intensities and contrast stress the optical system. It also helps to rotate between activities and to move around regularly. The well-known 20-20-20 rule is an easy-to-remember exercise for the eyes, and it suggests looking away from the screen every 20 minutes and focusing on something at least 20 feet (or 6 meters) away for 20 seconds. The frequent change of various vision distances supports the inherent physiological and metabolic processes of the eye. Wearing lenses that reflect or absorb blue light can also prove helpful in reducing some of the disproportionate amounts of blue light – especially from bright screens. However, it is essential to note that any lenses should block out not the entire spectrum of blue light. [ZEISS BlueGuard Lenses](#), for example, block only a specific portion of the blue light spectrum so that they can help against symptoms of visual discomfort and digital eye strain such as eye fatigue, blurred vision, and dry or irritated eyes.

In summary, lenses that absorb a particular portion of blue light can provide subjective and individual relief for the eyes of gamers and others who use digital devices more frequently.