

SAVE YOUR VISION

Special blue-light filters in 2 different color tints

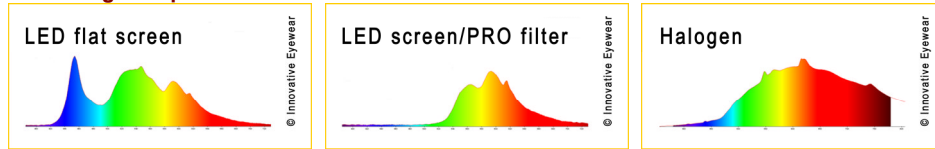
bluelightprotect 'PRO' for maximum blue-light protection and bluelightprotect 'LITE' for high blue-light protection with good color recognition.

Unexpected risks

Many scientific studies confirm that the light spectrum with a high proportion of blue light can have a harmful effect on the ocular fundus, the macula. The photoreceptive cells are damaged by blue light. A strong blue-light content also has a negative effect on the hormonal balance (stress hormones, melatonin) and that means permanent stress on our bodies.

Modern flat screen monitors with their mercury or LED-based back-lit illumination are heavy emitters of blue light. And even if the potential damage they can cause has not yet been fully proven by extended studies, it seems clear that there may be considerable risks associated with them.

Measuring the spectral distribution



(1) LED monitor. The blue peak is clearly evident, as is the almost complete lack of red. (2) The bluelightprotect filter eliminates the blue. Compare with: (3) Halogen bulb (a little blue, lots of red).

Computer eye strain

Working at the computer puts us under enormous strain. Headaches, fatigue, burning, watering, irritable or reddened eyes, flickering images, fluttering eyelids, intermittent short sightedness - these are typical complaints. Unfortunately, however, conventional computer glasses frequently fail to make a significant improvement.

With their precisely adjusted bluelightprotect blue-light filters PRISMA® computer glasses and CLiP-ON lenses offer reliable protection both from the strain imposed by the blue components in the light from computer screens and from all other artificial light sources with a high blue-light content. The color properties of PRISMA® computer filters also have a contrast-enhancing effect. They relieve eye strain and increase general wellbeing.

How can bluelightprotect help?

Just as the sun going down in the west radiates a warm reddish light, our organism, too, reacts to this spectral light composition. Blue light tends to have a stimulating effect and make us wakeful. It inhibits the production of the sleep hormone melatonin and promotes the formation of stress hormones. So our bodies are attuned to daytime. Red and near-infrared light, on the other hand, promote regenerative processes like cell renewal. This regeneration does not have a chance under artificial illumination with a major blue-light content, such as LED, low-energy lamps and computer screens.

The bluelightprotect PRO filter guarantees optimum protection from blue-light radiation.. It filters the excessive blue-light component out of the backlighting of flat screen computer monitors and other light sources with high blue-light content to a remarkable extent, and is specially recommended for people whose eyes are already under severe strain and for use in the evening and even the late afternoon when there is greater need for blue-light protection than during the day.

The slightly lighter LiTE filter is recommended for use where there is lower blue-light impact. Blue light is easier to manage during the day than in the afternoon or evening. This is also the most suitable filter if you need or want better color recognition for working at the PC and watching television. The adjustment period is usually shorter with the LiTE tint than with PRO.

Please bear in mind that it may take some time, varying from a few hours or days to one or two weeks, until you get used to the change in color. You should be aware that an adjustment period is quite normal , so you should not be tempted to give up the glasses and put them aside the first time you use them.

Both filters can be used, alternately if necessary, depending on the prevailing light conditions. Every user can decide according to their own individual needs and choose the most satisfactory filter as required.

Both colors may also be used as sunglasses, with medium or light anti-glare protection. The LiTE tint is excellent for daylight driving (in the EU only, not according to US and Australian standards). The PRO tint is not licensed for use in traffic!

Features of the different color filters	PRO	LiTE
Blue-light protection	++	+
Protection from melatonin reduction	++	+
Light transmission approx.	55%	72%
Blue-light filter (400 - 450 Nm) approx.	99%	99%
Blue-light filter (450 - 500 Nm) approx.	99%	90%
UV400 filter	100%	100%
Adjustment period	o	+
Contrast	++	++
Suitable for TV viewing	o	+
Color recognition	o	+
Suitable for driving	-	++
Lenses anti-reflection coated on back (P1 has full anti-reflection coating)	Yes	Yes

++ very good, ideal + good o average, satisfactory - low, not suitable

Product features

All our PRISMA® spectacles and CLiP-ON lenses are manufactured from materials that meet the highest quality standards and are CE certified.

The materials used are highly shatter-resistant. The filter lenses are hard sealed with anti-reflection coating on the back. The model P1 filters have full anti-reflection coating. Disturbing reflections and light effects caused by external incident light are greatly reduced and contrast is enhanced. The P1 lenses also have a water-repellent coating - Clean Coat - which greatly reduces the tendency to get dirty. All filter lenses are equipped with a UV-400 filter so they can be used as sunglasses giving a low level of brightness protection.

PRISMA® CLiP-ONs are suitable for clipping on to most conventional optical lenses and can be easily adjusted if necessary. They have a clever flip-clip mechanism allowing the user to flip up the colour filter quickly as required. When attaching them to your own spectacles, you should take care to attach the clips correctly and avoid letting them slip and slide on your lenses so as not to damage them.

Cleaning and care

Clean your glasses with a soft cloth (the microfibre case sometimes included is also suitable) or warm water and washing-up liquid if necessary. Then dry them with a soft cloth. Please take care when cleaning them not to exert too much pressure on the lens surfaces to avoid premature wear and tear on the lens coatings. Do not use paper towels and other types of material containing wood fibre. Frequent use of the glasses and CLiP-ON lenses can result in fine scratches on the surface. These are normal symptoms of wear and tear and do not give grounds for warranty claims.