

Optimising Vision with Advanced Sunwear



Rodenstock

Eye care professionals play a pivotal role in ensuring optimal vision correction for patients, and sun protection is no exception. The world of sunwear is constantly evolving, with cutting-edge technologies offering solutions tailored to your patients' specific needs.

It is our role, as industry professionals, to answer the question asked by many of our customers; "Is there a perfect pair of sunglasses for me?"

The ever-expanding landscape of advanced sunwear technologies demands a deep understanding to effectively guide our customers towards the ideal solution.

WRITER [Alycia Coupe](#)

For activities plagued by intense glare, polarised lenses are the undisputed champions. They incorporate a specialised filter that blocks horizontally reflected light, significantly reducing glare bouncing off water, snow, roads, and other flat surfaces. This translates to sharper vision, improved contrast sensitivity, and reduced eye strain, which is ideal for driving, fishing, boating, and other outdoor pursuits.

Sun tint lenses on the other hand, offer a reduced level of glare reduction by simply adding a coloured dye to the lens. For optometrist Luke Yong of Luke Optometry in Sydney, sun tint lenses simply "can't compete with the effectiveness of polarised lenses. Polarised lenses provide a significant improvement in visual comfort and clarity, especially in environments with intense glare."

A criticism of polarised lenses has been that they can interfere with liquid crystal display

screens, causing black, very dark, or even blank splotches. This is due to the liquid crystals, which do not emit light themselves, only reflecting horizontal light. As described above, polarised lenses are designed to block horizontal light and only allow vertical light to reach the eye.

The good news is that viewing liquid crystal screens when wearing polarised lenses is increasingly a problem of the past. Recognising the popularity of these lenses, manufacturers are changing the direction of polarised filters in new screens and devices. Consequently, most modern devices and displays (outside of aviation), are now minimally impacted by polarised lenses.

As Craig Johnston of Younger Optics explained, “The polarised filter is set at 180 degrees in our specs. The polar filter in the digital dashboards are now being set at 45 degrees to stop the ‘bi-refringence’. A problem still exists for heads up displays (HUDs) however, because the display is reflected up onto the windscreen”.

Due to the HUD’s reflection angle off the windshield, the virtual image is polarised at the same angle as glare coming off the road. This causes sunglasses to filter out the HUD image, leaving the HUD seemingly invisible.

COLOURS FOR SPECIFIC ACTIVITIES

While Justin Chiang of Tokai Optical cautioned that “colour perception is subjective, and people have different preferences”, it is important to understand that lens colour does play a crucial role in optimising vision for specific activities.

To guide your recommendations, in conjunction with lifestyle questioning, you may like to consider what our industry professionals had to say:

- Grey-based lenses minimise colour distortion, making them perfect for boating and driving applications (Justin Chiang, Tokai Optical).
- Copper-based lenses enhance reds, browns, and yellows, which can be ideal for sports like golf where target discrimination is crucial (Luke Yong, Luke Optometry).
- Brown-based lenses provide excellent contrast for everyday use, particularly during hikes or walks (Dr Fiona Om, CR Labs).

PHOTOCHROMIC LENS ADVANCEMENTS

Photochromic lenses contain light-sensitive molecules. When exposed to ultraviolet (UV) rays, these molecules undergo a chemical reaction, causing the lenses to automatically darken. Once the UV light source is removed, the molecules revert to their original state, allowing the lenses to clear again.

Photochromic lenses have long been a popular choice for their convenient light-adaptive properties. These options have

traditionally faced limitations, because as Dr Fiona Om from CR Labs explained, “Traditional photochromic lenses could be slow to activate and deactivate, creating an awkward adjustment period.”

Recent advancements – with enhancements in kinetic performance and improvements in low-light functionality – have addressed these concerns. Today’s photochromic lenses even offer some degree of activation in low-light conditions, which translates to greater visual comfort for patients who frequently transition between environments.

Furthermore, as Mr Johnston explained, “the latest generation, like Transitions Gen S, boasts significantly faster activation and deactivation times. This ensures seamless adaptation between light conditions, providing a superior patient experience.”

According to Mr Chiang, the patients most likely to benefit from these fast-activating photochromic lenses are those “with dynamic lifestyles who frequently transition between sunlight and shade”.

Furthermore, these lenses are particularly beneficial for:

- Active individuals who engage in outdoor activities throughout the day and require variable light protection. Photochromic lenses adjust automatically, eliminating the need to carry multiple pairs.
- Convenience seekers looking for a one-stop solution, offering both sunglasses and clear lenses in a single pair.

It is important to note here that car windshields block most UV rays, preventing traditional photochromic lenses from activating sufficiently while driving. However, advancements such as Drivewear address this issue by reacting to visible light as well.

ADVANCEMENTS IN TECHNOLOGY

Alongside faster-activating photochromic lenses and drive-optimised lenses, we’re seeing other advances in sun lenses that include:

- CR Labs’ Satin+ premium anti-reflective coating with very low reflectance,
- Mirror coatings for both a stylish look and an additional layer of glare reduction where intense sunlight is a concern, and
- Tokai’s natural colour coating, which is designed to maintain natural colour perception while still reducing glare, making them ideal for photographers and other professionals who rely on accurate colour perception.

COMPLETE RX PROGRAMS

Complete Rx programs offer a compelling solution for patients requiring prescription sunglasses and practitioners looking to streamline processes. These programs, as

“most modern devices and displays (outside of aviation), are now minimally impacted by polarised lenses”

highlighted by Mr Yong, “provide specialised products... resulting in superior optics and a refined fit of lenses into frames”.

There are several benefits for both you and your patients:

- Enhanced efficiency for streamlined ordering and faster turnaround times,
- An elevated patient experience by guaranteeing fit and performance with brand warranty and quality assurance.
- Potential cost savings for customers as complete Rx programs can sometimes offer bundled discounts compared to purchasing each component separately.

Some complete Rx programs to consider:

- CR Labs and Safilo deliver the ‘Full Circle’ program, which includes Carrera authentic prescription glasses and sunglasses.
- SMITH Rx program offers a similar service with SMITH’s ChromaPop lenses.
- Maui Jim provides complete prescription glasses and sunglasses with various material and lens design options.
- Oakley also offers a complete prescription glasses and sunglasses solution.

CONCLUSION

By staying abreast of advancements in sunwear technology, you can equip your patients with the ideal sunglasses for their outdoor adventures. Consider factors like photochromic lens activation speeds, low-light performance, the impact of colour on vision during consultations, and the potential benefits of complete Rx programs. Remember, you play a vital role in ensuring optimal vision correction and sun protection for your customers. Empower them to see the world clearly and comfortably, no matter their outdoor pursuits.

Alycia Coupe is a qualified optical dispenser who joined the industry in 2018. She is an optical trainer with the Australasian College of Optical Dispensing and the Member Services Supervisor of Optical Dispensers Australia.

Sun Lenses and Frames

Opticare Sunmatic 11

Sunmatic II is the premium lens designed for those on the move, ensuring clear vision indoors and outdoors with maximum performance under any sunlight conditions.

With rapid activation and deactivation, comparable to other photochromic lenses in the market, a true grey colouration, and compatibility across all Opticare progressive lens options, Sunmatic II offers unparalleled convenience for the wearer.

It is also upgradeable with Blue Guardian, blocking UV light up to 420 nm for added eye protection.

Contact: Opticare (AUS) 1800 251 852

HOYA

HOYA's sun solutions include Sportive, Sensity range, polarised, mirror, light mirror, and Hi-Vision Sun Pro premium sun lens coatings.

Hoya Sportive lenses are designed specifically for larger and high curved fashion and sport sunglass frames.

Sensity photochromatic lenses include Sensity 2, Sensity Fast, as well as Sensity Dark and Sensity Shine, which both deliver extra darkness outdoors and behind car windows.

Sensity Shine has a subtle mirror coating when unreacted, which transforms to a mirror lens in the sun.

Sensity Fast (pictured) is the fastest light adaptive lens available,¹ designed to address your patients' biggest pain point of slow fade back speed when going indoors, fading back to clear in seconds.²

HOYA's mirror collection comprises three full mirror coatings (in gold, silver, and blue), and four light mirror coatings (blue, silver, copper, and violet).

Hi-Vision Sun Pro improves the appearance of prescription sunglass lenses by eliminating



Opticare Sunmatic 11

unwanted colour reflections on the front surface. This makes the prescription sunglasses look more like the original plano pair tried on by the customer in store.

Contact: HOYA Lens Account Manager

References

1. Up to 45% faster in reaching the half faded back state vs the fastest fade back of the two leading players in the market (1.6 with AR coating brown). Source: HOYA internal product performance validation, conducted September 2022. (1.6 with AR coating brown). Data on file HOYA.
2. Takes less than 50 seconds to reach half faded back state starting from 76% (or category 2) max absorption at dark state on 23°C (1.6 with AR coating grey) Source: HOYA internal product performance validation, conducted September 2022.

Lambda by Rodenstock

It is Rodenstock's mission to provide sharper vision for all spectacle wearers – this also applies to sunglass lenses with and without prescription. With the innovative sunglass Lambda lens technology, Rodenstock offers high-precision, contrast-enhancing sunglass lenses that optimise the colours that the lens transmits, thereby increasing contrast perception.

These high precision sunglass lenses protect the eye without compromising visual details. Colour and contrast are enhanced for sharper

vision, better depth perception, and more detail sharpness.

Lambda lens technology provides full UV protection for your patient's eyes and is available in individual prescriptions and in a wide range of colours.

Contact: Rodenstock (AUS) 02 9748 0988



Lambda by Rodenstock



HOYA

Optilux

PREMIUM LENS SERIES

German Technology, Australian Design

Discover Optilux Premium Progressive Lenses by Opticare. Designed in Sydney by our lens experts, these lenses use advanced German technology to minimise distortion and provide clear vision at all distances. Validated by cutting-edge lens mapping, Optilux lenses are becoming recognised as some of the best on the market. Experience quick adaptation and enhanced visual clarity without compromise.

New Generation German Lens Technology



Digital Intelligence Technology (DIT)

Superb optical quality & low
unwanted astigmatism



Power Gradient Technology (PGT)

Advanced design optimisation
& wide fields of view



Digital Adaptation Technology (DAT)

Very minimal distortion & immediate wearer adaptation



Intelligent Individualisation Technology (IIT)

Outstanding customisation to meet the wearer's
unique visual needs

Premium Lenses • Office Lenses • Young Adults Lenses • Anti-Fatigue Lenses • Behavioural Lenses • Specialty Lenses

Contact your local BDM to learn more about Optilux and our other lens products.

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0413 701 214

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joanne.s@opticare.com.au
0403 097 536



Shamir PhotoGlamour with Transitions

Add a pop of colour to your patients' lenses. Shamir PhotoGlamour with Transitions light intelligent lenses activate in sunlight and rapidly fade back to clear, while retaining their light colouring. They combine visual correction with a dynamic system to adapt to all light conditions, looking after your patients' eyes both indoors and outdoors.

The Shamir Glacier Sun UV anti-reflective coating tastefully brings out the colouring in the lenses thanks to its achromatic properties (on the outer surface).

Choose from glamorous, fashionable, and stylish colors that are simply out of this world.

Visit: shamir.com/au



Transitions Gen S

Transitions Gen S is Transitions Optical's latest technological release, where three core performance pillars redefine wearers' eyewear experience:

Gen Speed: Ultra-responsive to light,¹ fully clearing indoors and darkening in seconds

outdoors.² When fully activated, the lens is as dark as a sun lens² and fades back in around two minutes.³

Gen Smart: Effortless vision experience. Transitions Gen S offers better visual performance, faster,⁴ to ensure a continuous visual experience in harmony with varied and changing light environments. Thanks to its responsiveness to light, during fade back there is 40% faster vision recovery and 39.5% improved contrast sensitivity vs Transitions Gen 8.⁵

Gen Style: A spectacular colour palette in eight exclusive colours, including the new colour, ruby. The range of lens colours provides endless styling possibilities for wearers to express themselves when pairing frames and lens colours.

Contact: Transitions Account Manager

References available at mivision.com.au.

SunSync Light Reactive

VSP Optics' photochromic solutions include SunSync and SunSync Drive XT.

Original SunSync is a conventional light-reactive lens that gives you everything you want in a base lens that's anything but basic: dark outdoor colour, excellent indoor clarity, fast reaction times, superior temperature stability, 100% UV protection, and outstanding durability in one stylish package.

SunSync Drive XT combines the benefits of in-car activation with all the advantages of SunSync lenses.

Both SunSync and SunSync Drive XT are backed by a one-year, 100% satisfaction guarantee, allowing you and your patients to try them risk free for 12 months.

Contact: VSP Optics (AUS) 02 9697 8080





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CIRCLE

COMPLETE PAIR PROGRAM

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SEE THE WORLD AT ITS BEST



CR
See Better.



Enquiries:
info@crlabs.au

NuPolar Polarised

Far reaching reputation and consistent reliability, along with a wide range of colours, styles and materials, has positioned NuPolar as the polarised lens of choice for eye care professionals globally.

Trusted to deliver long-lasting quality and value for money, you can be confident patients will be satisfied with NuPolar polarised lenses. Colours remain consistent and do not fade over time, excellent film adhesion eliminates delamination problems, and heat stability means the lenses will not fade or delaminate when left in hot cars.

Available in solid tint, gradient tint, and mirror finish in multiple colours, along with photochromic technology.

Visit: youngeroptics.com.au

Full Circle

Full Circle is an omni-channel frame and lens program, offering a selection of market-leading and high-profile Safilo frame brands, coupled with high-quality prescription lenses from CR Labs.

The program offers a wide selection of best-selling frames across popular brands including Carrera, Kate Spade New York, Carolina Herrera, BOSS, Under Armour, Polaroid Kids, and Privé Revaux. The omni-channel program brings exceptional value for practices by providing streamlined processes. This allows your practice to offer the best experience to patients through expedited completion of jobs, while maximising profitability.

Contact: Safilo Australia (AUS) 1800 252 016



Full Circle



NuPolar Polarised



Ugly Fish

Ugly Fish

Ugly Fish sunglasses are designed for the harsh conditions of the Australian outdoors. Choose from a range of tough, lightweight frames in durable materials.

- The 'Unbreakable' range of Tpee flexi-frames are virtually indestructible. Twist them, bend them, they'll bounce right back.
- The Ugly Basics range offers great value, in your choice of polycarbonate frames.

For the ultimate outdoors experience, choose from the Ugly Metals aluminium range, or ultra lightweight TR-90 frames.

Frame and lens packages are available through Rodenstock Labs, offering a great

value combination of tough Ugly Fish sports and leisure frames, expertly fitted with high quality Rodenstock lenses.

Contact: Piranha Eyewear (AUS) 1300 369 574

Marchon

In preparation for the warmer weather ahead, discover Marchon Eyewear's Sun Rx program: a sun frame and lens package loved for its simplicity and improved practice margins.

Marchon Eyewear's Sun Rx program offers a curated catalogue of specially selected sunglass frames for Marchon brands, including Calvin Klein, Nike (pictured), Anne Klein, Bebe, Nautica, Nine West, and Coast. Pair the selected Marchon frame with high quality VSP Optics sun lenses for a complete hassle-free package.

Sun Rx guarantees the latest frame trends suiting a wide range of scripts and budgets. Marchon's Sun Rx program offers access to a multitude of benefits, including attractive frame package pricing, efficient turnaround, and dispensing tools.

Contact: Marchon (AUS) 1800 251 025



Marchon

MAKO

MAKO Rx polarised lenses are freeform designed and digitally compensated, providing wearers with high wrap lenses at an affordable price.

They're available from 1.5 (CR39) through to 1.67 index lenses in both single vision and multifocal, and with 20 lens variations including photochromic, drivewear, mirror coatings, and 1.6 HD (high definition) glass lenses with internal mirrors to prevent the mirror scratching.

The Re-MAKO program provides customers with a 50% discount on 'exact replacement' of lost or damaged pairs within two years of purchase.

Contact: MAKO (AUS) 02 8436 6666



Carrera Authentic

In the spirit of high performance and innovation, Carrera Authentic prescription lenses represent the next step in design and visual performance. Offering consumers the opportunity to receive the authentic Carrera style and quality in both their frames and lenses, as well as a certificate of authenticity card, helps facilitate a complete Carrera brand experience.

Carrera Authentic prescription lenses offer visual solutions using the latest lens technologies to deliver premium optics, providing impressive clarity with the authentic Carrera style. Carrera Authentic prescription lenses are offered as part of the omni-channel Full Circle program, offering a complete Rx job with streamlined processes for practices and their consumers.

Contact: Safilo Australia (AUS) 1800 252 016

SMITH Rx

CR Labs' SMITH Rx program with Safilo offers top-notch outdoor prescription sunglasses featuring ChromoPop lenses, ideal for sports like fishing, skiing, and biking. These lenses enhance contrast and natural colour, providing impressive clarity and performance in various light conditions.

SMITH's innovative eyewear combines style with functionality, making it an ideal choice for outdoor enthusiasts.

Contact: Safilo Australia (AUS) 1800 252 016 or CR Labs (AUS) 1800 334 867

Revo

Revo sunglasses were first created using lens technology developed by NASA as solar protection for satellites. Revo continues to build on its rich tradition of technology and innovation by offering the clearest and most advanced high-contrast polarised eyewear.

Whether your patients require prescription lenses or seek the versatility of photochromic lenses that adapt to changing light conditions seamlessly, Revo offers a diverse range of lens technologies, catering to various needs and preferences.

Ninety-eight per cent of Revo sunglasses are available with a premium Revo Rx program using exactly the same lenses as offered in the plano sunglasses. Revo photochromic lenses adapt to changing light in seconds and are offered in most of the popular and premium models.

Visit: aus.revo.com



Transitions®

Transitions®
Gen S™

ULTRA
DYNAMIC
LENSES*



SUPERPOWER YOUR GLASSES  **SUPERSMOOTH YOUR LIFE**

*Transitions® GEN S™ is fully clear indoors and darkens in seconds. For polycarbonate & CR39 lenses across colours achieving 18% transmission at 23°C outdoors. Transitions and the Transitions logo are registered trademarks of Transitions Optical Inc. used under license by Transitions Optical Limited. GEN S is a trademark of Transitions Optical Limited. ©2024 Transitions Optical Limited. Photochromic performance may vary across colours and lens material and is influenced by temperature and UV exposure. Selected frames may not be available for purchase. Frame by Ray-Ban® - Lenses Transitions® GEN S™ Sapphire.

BiSphaera by Oakley

Oakley's latest release, BiSphaera, is a versatile counterpart to the popular Flak 2.0 XL, blending a sporty aesthetic with adaptability to get your patients' vision sport ready. For active wearers in both sport and life, these dual-lens performance sunglasses seamlessly transition from dominating on the field to conquering the daily hostile environment.

BiSphaera offers lightweight and flexible comfort with the option of Oakley Authentic prescription and Prizm Lens technology.

Contact: EssilorLuxottica Account Manager

Porsche Design

The Porsche Design Hexagon series (P8971) is inspired by hexagonal screws from the Porsche 911 motor block. Its stability and precision are celebrated by four screws in the 100% titanium front, which are screwed by hand.

Thanks to the purist design language, the Hexagon screws become the focus of attention. Sophisticated design through precision makes this ultra lightweight and the adjustable high tech-polyamide RXP temples are perfect for wearing comfort.

Contact: De Rigo (AUS) 02 9428 1500



BiSphaera by Oakley



Porsche Design



Flip-up Sunglasses

Flip-up Sunglasses

Enhance your practice offerings with Optica's Flip-up sunglasses, the ultimate clip-on sunglasses designed for patients who wear prescription glasses.

These versatile sunglasses fit comfortably onto existing eyewear, providing superior UV protection and glare reduction without compromising style or comfort. By offering Flip-up sunglasses, you can cater to a broader range of customers seeking convenience and functionality.

Available in three different shapes and two different colours, Optica Flip-ups not only diversify your product range, they demonstrate your commitment to comprehensive eye care solutions.

Contact: Optica (AUS) 1800 199 860

Maui Jim

Maui Jim has a truly authentic Rx program, investing in two state-of-the-art prescription labs – one in the United States and a second in Germany.

Each lens in the Maui Jim portfolio is digitally processed and fully compensated, and precisely calibrated for Maui Jim frame shapes. According to Maui Jim, this produces lenses that are 10 times more accurate than those produced in conventional labs and ensures the best wearer experience. Coupled with Maui Jim's MauiPassport technology, the patented MauiBrilliant lens material is an industry best. With an Abbe value of 56, it offers optics nearly as clear as glass, and almost double the clarity of traditional polycarbonate lenses, yet it is one third the weight of glass.

Contact: Maui Jim (AUS) 1800 010 244 



Maui Jim