Optray Sunglasses Owner's Manual

V5-250



OPTRAY EYEWEAR

Congratulations on your purchase of premium OPTRAY LCD sunglasses. These are the first active and fully automatic sunglasses with LCD technology, that don't need any battery or maintenance. Your OPTRAY LCD sunglasses will work reliably for years without the need to charge or change batteries. (LCD: liquid crystal display)

Every pair of OPTRAY sunglasses bears the CE mark that represents compliance with European guidelines 89/686/EEC in connection with ISO 12312-1. All OPTRAY sunglasses are also in compliance with the US standard ANSI Z80.3 for nonprescription sunglasses and fashion eyewear.

How do the sunglasses work?



The OPTRAY Sunglasses darken to adapt to the brightness of your surroundings. Direct sunlight hitting the sensors is efficiently converted by the sensor into electricity, which darkens the LCD according to its intensity faster than 0.1 seconds. Plenty of sunlight, dark sunglasses, little sunlight, light sunglasses.

The LCD darkens more at the top than at the bottom, creating a gentle darkening process to create the most comfortable wearing experience possible, adapted to the eye.

The sensors work in the infrared spectrum of sunlight. If the infrared radiation is reduced by filters, e.g. on car windows, the LCD also darkens less.

Filter	Transmission	Description			
category					
0	80 - 100%	Transparent or slightly tinted			
I	43 - 80%	Light to medium filter			
11	18 – 43%	Dark universal filter			
III	8 - 18%	Very dark filter (high mountains)			
IV	3 – 8%	Extremely dark filter (glaciers). Not suitable for driving			

The fully automatic adjusting OPTRAY Sunglasses offer a transmission from 30% in bright state to 8% in fully dark state depending on the ambient sunlight.

Range of application and use restrictions

OPTRAY sunglasses guarantee protection from harmful UVA, UVB and UVC rays up to 400 nm.

Do not use for looking directly at the sun!

Do not use OPTRAY sunglasses while driving at night or in otherwise reduced lighting conditions.

OPTRAY sunglasses have a shock resistance in accordance with ISO 12312-1 and ANSI Z80.3, however they ARE NOT unbreakable. Therefore, OPTRAY sunglasses are not to be used as safety glasses, as they do not protect against eye injuries.

OPTREL Sports excludes any liability for possible damage occurring or having occurred from improper use.

General information

The LCD is pressure sensitive. Avoid bending or squeezing the LCD, it can be irreversibly damaged. Black dots in the display are an indication that the LCD is overstressed.



Optray glasses can cause photosensitive epileptic seizures, especially with sensitive people. Unfavorable light-shadow effects, Optray sunglasses can intensify and promote a seizure in sensitive individuals.

CH-	Dokument-Änderung		Dokument-Freigabe		Index / Version	Dokumentart / Nr.:	9615.001.01
	Datum	Visum	Datum:	Visum:			Q:\F_E\50_Optrel_Sports\51 - Entwicklungsprojekte\51001 -
Erstellt:	25.06.2020	ROSC			00		Optray\08_Marketing Manuals Manual Optray_v4.11_250um.docx
Letzte Änderung:	19.02.2021	ROSC			06	Optrel AG - Industriestrasse 2 - CH-9630 Wattwil	

Optray Sunglasses Owner's Manual

V5-250



Cleaning

Be careful when cleaning your sunglasses! Remove any dirt by blowing softly on them. Clean only with the included OPTREL microfiber bag. Do not use paper towels or other materials containing wood fiber or any other cleaning material. The lens has an anti-scratch coating on the outside and on the inside.

Storage

To prevent the lenses from being scratched, it is best to store the sunglasses only in the microfiber bag and case designed for them. The sunglasses must not be stored in direct sunlight or in locations where the temperature exceeds $50^{\circ}C$ (122°F). If the sunglasses have become too hot, black dots may appear in the LCD. These usually disappear after about 7 days.

Inspection

Inspect your glasses prior to use for possible damage. If the lenses show scratches, cracks or other blemishes, they should be repaired or replaced; otherwise sufficient protection from harmful UVA and UVB rays cannot be guaranteed.



Lens removal

Remove nosepiece by bending it gently to the center and pull it out. Hold the lens at the edge; bend out carefully the frame to the side until the lens is released.

Lens installation

Hold the top frame of the glasses with one hand while grasping in the center and one end of the lens with the other hand. Gently insert the lens into one end by inserting the lens mounting tab into the frame.

Install the nosepiece by centering it on the lens and applying slight, even pressure in the center to seat it onto the lens.

Limited Warranty

Optray glasses are covered by a two-year manufacturer's warranty against manufacturing defects from the date of purchase. The guarantee is only valid for the original purchaser on presentation of a valid proof of purchase from an authorized Optray dealer, on which the date of purchase is clearly stated. The serial number engraved on the lens at the top edge is the unique identification of the glasses. The Optray warranty does not cover scratching, crushing or breaking of the lenses. This warranty is void if lenses are modified, misused or fitted. The customer's right of recourse in the event of a breach of warranty is limited, at Optray's discretion, exclusively to repair or replacement of the part in question. Customer's statutory rights under applicable national or state laws governing the sale of consumer products are not affected by this warranty.

Development, homologation and distribution in the EU and worldwide outside North America: OPTREL Sports AG, Industriestrasse 2, CH-9630 Wattwil, Switzerland Distribution North America: Cyber Optic Shades LLC, 7931 E. Pecos Rd., Suite 209, Mesa AZ 85212, United States of America

Warranty Card

In case of a problem with your sunglasses, please contact Cyber Optic Shades LLC.



Art. No. 1500.001 OPTRAY neon Art. No. 1500.002 OPTRAY onyx

Serial number: note the sticker on the packaging and the upper edge of the lens

https://www.cyberopticshades.com

CH-	Dokument-Änderung		Dokument-Freigabe		Index / Version	Dokumentart / Nr.:	9615.001.01
011-	Datum	Visum	Datum:	Visum:		Pfad Dokument:	Q:\F_E\50_Optrel_Sports\51 - Entwicklungsprojekte\51001 -
Erstellt:	25.06.2020	ROSC			00		Optray\08_Marketing Manuals Manual Optray_v4.11_250um.docx
Letzte Änderung:	19.02.2021	ROSC			06	Optrel AG - Industriestrasse 2 - CH-9630 Wattwil	