

Nova UHD - A Progressive Addition Lens with Exceptional Clarity

Ranadeb Banerjee*

Senior Optometrist, Chief Training Manager at VISION RX LAB, Department of Optometry, India

*Corresponding Author: Ranadeb Banerjee, Senior Optometrist, Chief Training Manager at VISION RX LAB, Department of Optometry, India.

Received: December 31, 2022

Published: January 01, 2023

© All rights are reserved by **Ranadeb Banerjee**.

NOVA EYEWEAR is a flagship brand from the house of the globally renowned company Vision Rx Lab. It is a fast growing brand, available across 25 countries around the world, offering complete eyewear solution in the form of innovative Ophthalmic Lenses, Ophthalmic Frames, Prescription and Non-prescription Sunglasses, Swimming Goggles, Safety eyewear etc. The latest innovation from the Progressive Addition Lens category of the brand is a custom designed lens that offers outstanding visual clarity.

The level of clarity in the new Nova UHD (ultra-high definition) - an advanced progressive addition lens - is the outcome of extensive research and development and multiple cutting-edge optimising technologies.

Nova UHD incorporates different design philosophies to meet varying visual requirements based on the optical correction required, frame choices, wearing parameters and lifestyle. It automatically selects the design best suited for the wearer's visual priorities. The lens also effectively reduces a portion of the unwanted swim effect that bothers the wearer while scanning from one area of the lens to the other through high-order mathematical calculation guided optimisations.

Detailed here are the major optimising technologies that make Nova UHD the ideal choice of lenses for the 40-plus age group.

Multi-aspheric technology is used to reduce the aberrations associated with both the spherical and cylindrical power elements on numerous meridians by using a non-rotational symmetrical surface. While the front surface is of equal curves in all meridians, the rear surface is designed with proprietary Digicontour

Technology, where the asphericity varies from meridian to meridian to provide unrestricted and considerably wider fields of clear vision.

Its new Aberration Filter System 2.0 allows for better correction of the induced oblique aberrations by controlling the relative curvature changes through the creation of arbitrary surfaces.

Maxiview Design takes into account the real shape of the frame and uses a unique algorithm, so that the distribution of aberrations are modified and reduced within the useful area of the lens.

Binocular Balancing System calculates the levels of undue astigmatism on both sides of the corridor and reduces them to improve the perceived binocular single vision and provide wider visual fields.

Digital Profile ensures a longer vertical area with the requisite presbyopic addition, making for a far more comfortable posture for digital device activity up close. The ergonomics have been designed for better adaptation and comfortable vision while reading and using digital devices.

Optireal measures the individual's actual spectacle wearing positions and lens orientations to assess the required personalised refractive correction for the lens and deliver the exact requirement.

Slimtech Technology incorporates a dynamically contoured vision zone which makes the lenses look aesthetically far more appealing while maintaining the best visual performance. This exclusive and patented technology for thickness optimisation enables the centre thickness (when the edge thickness is the limit)

of a plus lens and the edge thickness of a minus lens (when the centre thickness is the limit), to be reduced to the maximum extent possible by using the effective frame data in the optimisation algorithm and modifying the surface outside the useful zone.

With Nova UHD, opticians have the option of variable minimum fitting height and near inset, and can therefore choose from practically all shapes and sizes of frames while at the same time offering lens wearers the best visual experience.

Aside to the complete and individualised customisations that make the lenses deliver the best vision and aesthetics, Nova UHD comes with a touch of customised personalisation where three letters from the wearer's name can be LASER engraved on the lenses - making it a signature collection for the consumer.