



MAGNIFY PATIENT EXPERIENCE.
GROW PATIENT TRAFFIC.
WITH ONE COMPACT STATION.



VISION-S™ 700

IMMERSIVE REFRACTION
STATION



VISION-S™ 700

The Vision-S™ 700 refraction station is a standalone subjective refraction unit with an immersive optical path allowing refraction exams in less than a square meter.

Its **ultra-compact design and immersive experience** make a difference, offering a 3-minute¹ refraction process designed to optimize practice flow. Furthermore, it incorporates the **fully-guided Easy Refraction Mode™²** designed for a more cross-functional approach within your team.

IS YOUR REFRACTION CAPACITY A CONSTRAINT FOR YOUR PRACTICE?

GROWING DEMAND IN REFRACTION

While the need for refraction is constantly growing worldwide, there is an evident shortage of practitioners³.

The duration, skills requirements and space limitations constrain the potential of refraction.

LIMITS OF TRADITIONAL REFRACTION

Traditional phoropters heavily rely on the ECP's expertise and gaining time usually means limiting precision or patient experience.

Standard refraction instruments necessitate significant space for controlling accommodation during distance viewing⁴, which limits the possibility to incorporate multiple lanes.

TECHNOLOGIES TO DELIVER BETTER VISION CARE

We develop advanced solutions to help you address the capacity issues inherent in traditional setups.



OUR SOLUTION TO REINFORCE
YOUR REFRACTION CAPACITY:
**AN ULTRA COMPACT DEVICE WITH
A UNIQUE IMMERSIVE EXPERIENCE⁵**

¹ EssilorLuxottica - Data on file 2021 - Vision-R™ 700 clinical validation study - Independent third party - Portugal - N=41. ² EssilorLuxottica - Data on file 2023 - Easy Refraction Mode™ clinical investigation - Independent third party - Portugal - N=40. ³ The international agency for the prevention of blindness. Mapping the global optometry workforce. 20.07.2021. ⁴ Kucika A, Rumjanceva I, Patrova T, Svede A. The effect of viewing distance on subjective refraction assessment. Proceedings of the Estonian Academy of Sciences [Internet]. 2021;70(4S):317. Available from: https://kirj.ee/wp-content/plugins/kirj/pub/proc-4S-2021-317-325_20210929100221.pdf. ⁵ The Vision-S™ 700 refraction system, developed by Essilor Instruments, is designed to allow patients to experience their prescription through an advanced system that displays charts and sceneries covering a 32° field of view.



EXPAND REFRACTION CAPACITY WITH ENSURED ACCURACY



The Vision-S™ 700 refraction station multiplies your refraction capacity through speed, accuracy, ease-of-use and fully-guided refractions.

FAST AND ACCURATE

The state-of-the-art continuous lens module and algorithms provide a rapid 3-minute subjective refraction with proven accuracy⁶. This enables ECPs to have more time to strengthen relationships with their patients and perform additional testing, such as binocular and near vision exam⁷.

- **3-minute subjective refractions made possible⁶** by a layered tuneable lens combined with algorithms, allowing for vectorial refraction and a more direct procedure.
- **Smart Program recommendation feature** takes into account the existing prescription, objective refraction, and age in order to recommend the most suitable and efficient refraction program with or without fogging.
- **Reliable results minimize non-adaptations** leading to improved customer satisfaction⁸.

EFFORTLESS, EASY, ACCESSIBLE

The exclusive algorithms and guided Smart Programs simplify the refraction exam. Practitioners can choose from three different modes:

- **Semi-automated customizable refraction programs** with a universal digital phoropter user interface to perform their preferred examination efficiently and flexibly.
- **Fast and Secure Smart Programs** using Essilor Instruments' proprietary vectorial refraction algorithms to gain time while ensuring accuracy.
- **Easy Refraction Mode™** for fully-guided refractions with a dedicated user interface.

COMPLETE BINOCULAR TEST TOOLKIT FULLY INTEGRATED

The VISION-S™ 700 possesses by design a wide range of binocular tests:

- **Horizontal and vertical phorias** with prismatic, Maddox or duochrome dissociation.
- **Stereoscopy tests.**
- **Absolute and relative accommodation amplitudes:** accommodative LAG, NPA, NRA, PRA.



FULLY-GUIDED REFRACTION

- Guided user interface with clear instructions on full-screen.
- Dynamic refraction program that automatically adapts the testing sequence to the patient's answers.



DESIGNED TO EASE PRESCRIPTION PROCESS

- Final spherical adjustment designed to reach patient's optimal visual acuity.
- Concise refraction report with refraction values, visual acuities and patient's preference.
- Switch to standard mode allowing additional testing and prescription adjustments in just one-click.
- Easily exportable data to other Vision-S™ and Vision-R™ for multi-room patient journey.

⁶ EssilorLuxottica - Data on file 2021 - Vision-R™ 700 Clinical validation study - Independent third party - Portugal - N=41.

⁷ EssilorLuxottica - Data on file 2020 - Clinical Validation of the Vision-S™ 700 Independent third party Study - Spain - N=61.

⁸ EssilorLuxottica - Data on file 2023 - Easy Refraction Mode™ clinical investigation - Independent third party - Portugal - N=40.

2

FREE UP THE SPACE YOU NEED AND GROW YOUR PRACTICE

A REFRACTION LANE IN ONE SMALL DEVICE

The Vision-S™ 700 is one of the most compact refraction stations integrating a phoropter and space-saving chart system. The usual patient-chart distance of 6 meters (20 ft) is no longer necessary thanks to exclusive distance simulation technology that allows you to explore vision function and refract from near distance to infinity within the device itself.

The Vision-S™ 700 refraction station shrinks the universe of the traditional refraction room into a compact station that takes just a tenth of the usual space. During the exam, the patient experience is expanded to a wide and infinite field of vision.

ALL THAT NEW SPACE LEAVES ROOM FOR MORE OPPORTUNITIES

Its ultra-compact design frees up valuable floor space, enabling you to reinvent your practice in imaginative ways.

- Free up extra space to create additional refraction lanes or other added-values activities.
- Develop a small practice concept thanks to the ultra-compact design.

CONTROL THE EXAM ENVIRONMENT

By controlling the environment, it is possible to make exceptional performance the standard:

- Control multiple refraction protocols, lighting and contrast.
- Harmonise patient experience.
- Promote patient loyalty with uniform, high quality experiences across multiple locations.



EXCLUSIVE OPTICAL LENS MODULE

- Provides continuous spherical and cylindrical power changes.
- Instant and silent lens power changes for greater patient comfort.
- Thanks to the optical module, Essilor's Digital Infinite Refraction™ method synchronously compensates and makes necessary adjustments in sphere, cylinder and axis to refract in 3 dimensions.

IMMERSIVE AND SPACE SAVING

- Compact system with 6m-40cm charts distance immersed in infinite 32° wide sceneries.
- The Vision-S™ 700 provides comparable clinical results as a traditional phoropter and 6m screen set up.⁹



3

WHEN REFRACTION BECOMES AN EXPERIENCE TO REMEMBER

GIVE YOUR PATIENTS A NEW EXPERIENCE

The Vision-S™ 700 refraction station incorporates a unique immersive technology that engages customers with a novel experience, increasing performance and optimizing processes. Designed to demonstrate the advantages of new vision correction, it propels the patient into scenes that enrich the refraction experience.

SHOW THE PRESCRIPTION IN ACTION

To illustrate the prescription, the patient is placed in real-life simulations, designed to help your patients visualize the benefits of their new prescription in impactful situations. The patient can clearly compare the before and after refraction results and make better informed purchase decisions.

HOW THE IMMERSIVE EXPERIENCE CAN ELEVATE YOUR WAY TO PRACTICE:

- Seeing the prescription in action builds confidence.
- Tinted and polarized prescription lenses demonstration through a dedicated video experience.
- Generates traffic through word of mouth.



80%

of patients preferred to be refracted with the Vision-S™ 700 rather than a traditional phoropter set-up.¹⁰



¹⁰ EssilorLuxottica. Data on file 2020. Vision-S™ 700 Clinical validation study performed by a third independent party, in Spain including N=61 patients (18.9-63 years old). Compared to Essilor Instruments APH 500 digital motorized phoropter. Survey results on refraction process comparison. 80% of patients preferred Vision-S 700 examination over 8% who preferred a traditional set up. N=61.



STATION



CONSOLE

TECHNICAL SPECIFICATIONS

CENTERING

Pupillary Alignment

49.0 to 80.0 mm at far distance (in 0.50 mm steps)
55.0 to 80.0 mm at near distance (in 0.50 mm steps)

Binocular
and monocular adjustments

Convergence

automatic, compared to the position of the target for near vision
and to the patient's pupillary distance

Vertex distance

from 4.0 to 30.0 mm in 0.5 mm steps, monocular, measured by cameras

MEASUREMENT RANGE

Sphere

from -20.00 D to +20.00 D

Cylinder

up to 8.00 D depending on the lens combination.
Cylinder from -7.00 D to 8.00 D with sphere at 0 D

Measuring Steps

- In "Standard" mode: 0.25 D increments with adjustable steps
- In "Intelligent" mode: multiple larger and smaller increments

Axis

0° to 180° in 1° increments, with adjustable steps

Prism

0 to 20 Δ in 0.1 Δ increments, with adjustable steps

AUXILIARY LENSES

Occluders

Dark, personalized convex lens

Pin hole

Yes

Retinoscopic lenses

+1.50 D, +2.00 D (powered by optical module)

Fog lenses

+1.50 D, +2.00 D (powered by optical module)

Jackson cross cylinders

± 0.25 D, ± 0.50 D (powered by optical module)

Fixed cross cylinders

± 0.50 D (powered by optical module)

Prisms

3 Δ base up / 3 Δ base down, 6 Δ base up, 10 Δ base in
(powered by varying prisms / diasporameters)

Maddox rods

red, horizontal and vertical

Red/green filters

red on right eye, green on left eye

DIMENSIONS AND WEIGHT

Compact refraction units

Length = 64.0 cm / Width: 32.5 cm / Depth: 55.0 cm / Total weight: 16 kg

Console (keyboard + screen)

Keyboard: 28 x 22 cm / Screen display: 10.4" / Total weight: 3.0 kg

LEDS

Visible white LED

Color: sunrise / Chromaticity CCT: 2700 K / Flux: 7 lm / Class: NC

Visible white LED

(Vertex distance) – Not used at the moment

Color: white / Chromaticity CCT: 5000 K / Flux: 35.9 lm / Class: NC

Infra-red LED

Color: IR / Wavelength: 850nm / Energy intensity: 50mW/Sr / Class: NC

Infra-red LED

Color: IR / Wavelength: 850 nm / Radiant intensity: 1000mW/sr / Class: 2

INPUT/OUTPUT

Compact refraction unit

AC Input: 100-240V; 50/60Hz; 2.3 – 1.1A DC
Output: 24V; 141.6 Watt
USB port (x4): DC Output 5V; 2A.

Console (keyboard)

AC Input 24V, 2A

FUSE

T 4AH 250V

Vision-S™ 700 is class I medical device. Manufacturer: Essilor International. Read the instructions in the user manual carefully. Non-refundable under the LPPR. As improvements are made, these specifications are not contractually binding and may be modified without prior notice.



ESSILOR INTERNATIONAL

147 rue de Paris
94220 Charenton-le-Pont - France
Tel: +33 (0)1 49 80 62 80
www.essilor-instruments.com



LEONARDO



Discover more
about Vision-S™ 700
on Leonardo platform