CV-82

Automatic Refractor Head (Phoropter)

Measuring Range

Sphere	-29.00D ~ +26.75D (Regular mode) · -19.10D ~ +16.85D (0.05D step mode) Step: 0.05D / 0.25D / 0.50D / 1.00D / 3.00D
Cylinder	-8.75D ~ +8.75D · Step: 0.25D / 1.00D
Axis	0 ~ 180° · Step: 1° / 5° / 15°
PD Range	Distance 48 ~ 80 mm, Near 48 ~ 76 mm · Step: 0.5 / 1 mm
Near Working Distance	35 ~ 70 cm
Rotary Prism	0 ~ 20△ · Step: 0.1△ / 0.5△ / 1.0△ / 2.0△
Jackson Cross Cylinder	±0.25D, ±0.50D
Double Cross Cylinder	±0.25D (Dissociated prism)
Retinoscopy Compensation	+1.50D (distance 67 cm), +2.00D (distance 50 cm)

Auxiliary Lenses

Pinhole Lens	Diameter 1 mm
Maddox Rod	Right (red, horizontal) · Left (red, vertical)
Red-Green Filter	Right (red) · Left (green)
Linear Polarizer	Right / Left
Circular Polarizer	Right / Left
Dissociated Prism	Right (3△ BU) · Left (3△ BD)
Fixed Prism	Right (6△ BU) · Left (10△ BI)
PD Lens	Both eyes (cross)
Fixed Cross Cylinder	±0.50D (axis fixed at 90°)

Product Specifications

Dimensions & Weight	Main unit: 365 (L) × 280 (H) × 110 (D) mm / approx. 3.8 kg Control panel: 243 (L) × 206 (H) × 200 (D) mm / approx. 1.95 kg
Power	100 ~ 240 V AC, 50 / 60 Hz, 80 VA

* Design specifications and details are subject to change without prior notice.



CV-82 Refractor Head

Redefine Clear Vision

BUILD YOUR STORE'S CORE COMPETITIVENESS

Break Homogeneity

Break free from the homogeneity of traditional refraction and build a unique service label.

Empower with Precision

Deliver precise data for refraction, refractive and premium cataract surgery.

Build Professionalism

With 5° (0.05D) refraction, build a professional reputation that lifts brand premium and trust.

Differentiated Competitiveness for Your Exclusive Edge

Scientific myopia control adapted to all vision needs

Precise Fitting · Comfort Upgraded

Capture Dual Needs

Focus on the dual needs of “comfortable vision + health protection”.

Superior Vision

Avoid over- and under-correction to keep the retinal image always sharp.

High Precision

Use 0.05D fine steps to pinpoint the “golden correction point”, eliminating under- and over-correction.

Customization

Provide tailored myopia-control solutions based on 5° (0.05D) refraction.

Full Adaptability

Suits children, first-time patients and those prone to visual fatigue.

Better Balance

Easily achieve monocular red-green and binocular balance for clearer, less-fatiguing vision.

5°
Refraction

Giving Precision a New Dimension



More Accurate Results

Equipped with 0.05D fine-step lenses, it captures subtle differences in the eye's refractive state for more reliable data support.

More Stable Operation

Dual upgrades in mechanical structure and software algorithms greatly improve gear precision for smoother lens switching.

More Comfortable Experience

A new ergonomic design with an integrated control panel delivers an even better refraction experience.

10.4" Integrated Control Panel

Equipped with a 10.4-inch HD touchscreen offering smooth, responsive touch operation, an intuitive interface, and one-touch access to core functions — easy to learn, letting optometrists get started quickly and boost efficiency.

Flip LCD Screen for More Efficient Communication

A flip-out LCD display breaks the limits of traditional fixed screens and adapts flexibly to different examination scenarios. During near-vision tests or data explanations, the screen flips directly toward the patient to present information clearly, improving communication efficiency and experience.

Multiple Astigmatism Measurement Modes

With ±0.25D and ±0.50D cross cylinders plus a dissociated prism for astigmatism testing, optometrists can choose their preferred method — especially for hard-to-test patients, where multiple methods verify measurement accuracy.

Data Visualization — Worry-Free and Reliable

Preview the refraction report with one tap — no tedious steps. View complete results instantly, spot abnormal data at a glance, and interpret reports quickly.