## **Auto Ref-Keratometer**

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PRK - 9000



Next-Gen Auto Ref-Keratometer for Fast, Accurate & Comprehensive Vision Analysis.



Unveiling More Than Your Sight

### **Auto Ref-Keratometer**

# **PRK-9000**

Next-Gen Auto Ref-Keratometer for Fast, Accurate & Comprehensive Vision Analysis.



#### 3D/2D Semi Auto Pupil Tracking

The three/two-dimensional automatic eye detection and focusing mechanism enables effortless and precise refractometry (-30D  $\sim$  +25D) and keratometry (5,0mm  $\sim$  13,0mm) measurements, powered by advanced algorithms and a high-speed image processor.



50 53 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Button	30	20	(i)
	Automatically align up and down, left and right directions	Auto	Auto	Manual
	Automatically align front and back directions	Auto	Manual	Manual



#### Near Vision Test

The necessity for progressive lenses can be evaluated through the "Near Vision Test." Upon completion of a refractive measurement, additional diopter power between +0.00D and +3.50D can be administered in increments of 0.25D or 0.50D, allowing for a comprehensive analysis of presbyopia.

#### Connectivity

Seamless integration is essential for versatile device usage in various settings. The PRK-9000 is equipped with RS-232C, Wi-Fi, and LAN connectivity, ensuring universal compatibility with standard platforms.



#### Color View Mode

The integration of a new color camera and LED lighting facilitates the examination of primary ocular conditions, including cataracts, conjunctivitis, keratitis, corneal abrasions, and abnormalities of the iris.



#### Enhanced Retro illum Observation

By the retroillumination method to the opacity of iris can be evaluated. 10 images for each eye, along with the measurement results, are saved and displayed simultaneously. This enhanced display functionality allows for a faster and more efficient real-time review and comparison of both the images and their corresponding results.

#### Advanced IOL Measurement Capability

The new PRK-9000 incorporates an enhanced IOL measurement feature. When intraocular lenses or cataracts affect standard refraction readings, the system automatically activates the IOL icon, allowing for precise measurements in such conditions.

#### Pre-Dry Eye Syndrome Observation

Meibomian gland dysfunction is a primary contributor to dry eye syndrome. The PRK-9000 employs infrared imaging technology to obtain high-contrast images of the Meibomian glands, facilitating the early identification and monitoring of pre-dry eye syndrome resulting from gland dysfunction.



#### Upgraded Printer with Auto-Cutter Function

The new PRK-9000 incorporates an enhanced IOL measurement feature. When intraocular lenses or cataracts affect standard refraction readings, the system automatically activates the IOL icon, allowing for precise measurements in such conditions.

#### High-Resolution Wide Display

The high-resolution wide display enhances the examination of detailed eye conditions and measurement data. It also features an HDMI output for high-definition observation on an external monitor.

#### Improved Joystick Performance

Experience smoother and accurate eye examinations with advanced joystick. Unlike the previous belt-type model, new joystick allows for precise control and eliminates vibration to ensure higher accuracy measurement.



#### Specifications



Measurement Modes	REF (Refractometry) KER (Keratometry) K/R (Continuous KER and REF) CLBC (Contact Lens Base Curve Measurement) K(P) (Peripheral Keratometry)
Refractometry	
Vertex Distance (VD)	0.0, 10.0, 12.0, 13.5, 15.0 mm
Sphere Power (SPH)	-30.00 $\sim$ +25.00 D (at the vertex distance of 12 mm) (Increments selectable between 0.12 and 0.25 D)
Cylinder Power (CYL)	$0.00 \sim \pm 10.00$ D (Increments selectable between 0.12 and 0.25 D)
Axis (AX)	1 ~ 180° (Increments: 1°)
Cylinder Form	-, +, MIX
Pupil Distance	Maximum 88 mm
Minimum Pupil Diameter	Ø 2.0 mm
Keratometry	
Radius of Curvature	5.0 ~ 13.0 mm (Increments: 0.01 mm)
Corneal Power	25.96 ~ 67.50 D (n = 1.3375) (Increments selectable from 0.05, 0.12, 0.25 D)
Corneal astigmatism	0.00 ~ -15.00 D (Increments selectable from 0.05, 0.12, 0.25 D)
Axis	1 ~ 180° (Increments: 1°)
Environmental requirements	
Operating Environment	Temperature: +10 to +40 ℃ Humidity: 30 to 90% RH Pressure: 800hPa ~ 1060hPa
Storage Environment	Temperature: -10 to +55 ℃ Humidity: 10 to 95% RH Pressure: 700hPa ~ 1060hPa
Transport Environment	Temperature: -40℃ ~ +70℃ Humidity: 10 to 95% RH Pressure: 500hPa ~ 1060hPa
Dthers	
Corneal Diameter	2.0 ~ 14.0mm (Increments: 0.1mm)
Memory of Data	10 measured value for each right and left eye
nternal Printer	Thermal line printer with Auto-Cutter function
Monitor	8-inch TFT LCD monitor(800x600 pixels, tiltable/swivel)
3D Auto Tracking Range	X: 10mm (±2mm) Y: 10mm (±2mm) Z: 10mm (±2mm)
Chinrest	Motorized
Interface	RS-232C, LAN, Wi-Fi, HDMI
Jpdate	USB (A type) memory card
Power Supply	AC100-240V, 50/60Hz
Power Consumption	55-85 VA
Dimensions	Approximately 260(W) x 520(D) x 480(H) mm
Weight	Approximately 20kg

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