

# KR-1

Auto Kerato-Refractometer



PERFORMANCE  
YOU CAN COUNT ON



## The Next Generation of Refractive Care

Topcon, with its wealth and experience in designing and manufacturing high performance refractometers since 1951, introduces a brand new model, the KR-1. The KR-1 is more stylish and more compact than ever before. The flexible control panel enables the KR-1 to be installed in many different positions in the examination room. The KR-1 provides an innovative operation experience and eliminates the need for a control lever. The KR-1 is the new leading refracto-keratometer.

### Features

#### » Simple and Quick Operation

- R / L fully automated measurement

#### » Easy-to-Use Color Touchscreen Control Panel

- The touchscreen control panel eliminates the need for a control lever

#### » Flexible and Space Saving Layout

- The adjustable control panel can be positioned in any direction

#### » New Compact and Ergonomic Design

- Ergonomic optical head and headrest design
- Compact body

#### » Reliable Measurement

- Features Topcon's Rotary Prism Technology for reliable, reproducible results

Function & Aesthetics Combine in the **New KR-1**







## Unique Features of the KR-1



The KR-1 takes automated operation to a new level. Simply touch the center of the pupil on the touchscreen control panel, and the KR-1 automatically obtains right and left eye information immediately. The KR-1 provides an innovative operation experience and eliminates the need for a control lever.

Fully Automated!  
Just touch the center of the pupil.

### Simple and Quick Operation

R / L fully automated measurement



Start

Right Eye

Automatic R → L Movement

Left Eye

Data Printout



# Easy-to-Use Color Touchscreen Control Panel

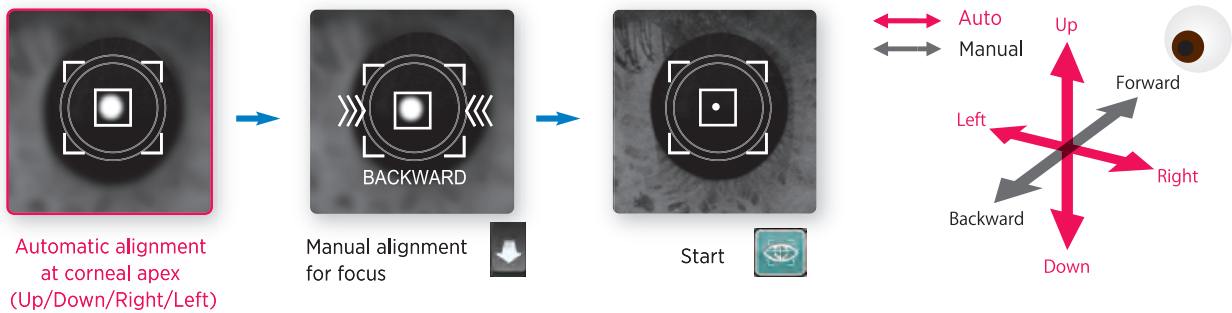
All operating procedures can be performed with the touchscreen control panel. The sophisticated buttons provide an intuitive operator experience. The KR-1 automatically takes measurement of the right and left eyes quickly and easily.



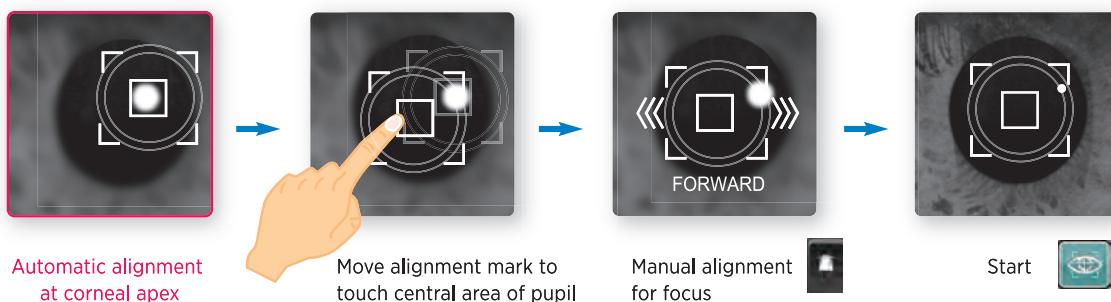
## Simple Manual Mode



The manual mode features simple operation as well. Automated alignment is performed for Up/Down Right/Left direction; only manual focus is required in this mode.



The difference between the pupil center and the corneal apex, allows the KR-1 to easily take measurements.





**NEW Style**  
Supporting patient

Side Position



**NEW Style**  
With eyelid open

Rear Position

## Flexible Layout and Space Saving Layout

The adjustable control panel enables the operator to be positioned anywhere around a patient because the control panel can be faced in a number of different directions. The compact body enables the operator to support the patient easily from many different positions during measurement even when the patient's eyelid needs to be opened. These unique aspects will contribute to space saving and flexible layout in your eye examination room.



Conventional position (Seated)

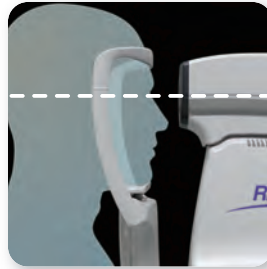
Front Position (Seated)



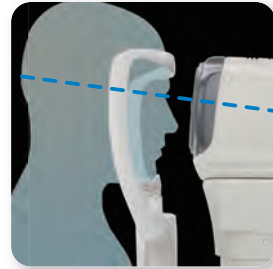
Conventional position (Standing)

Front Position (Standing)

## Ergonomic Optical Head and Headrest Design



Topcon conventional model



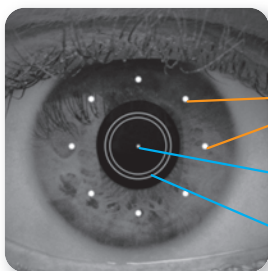
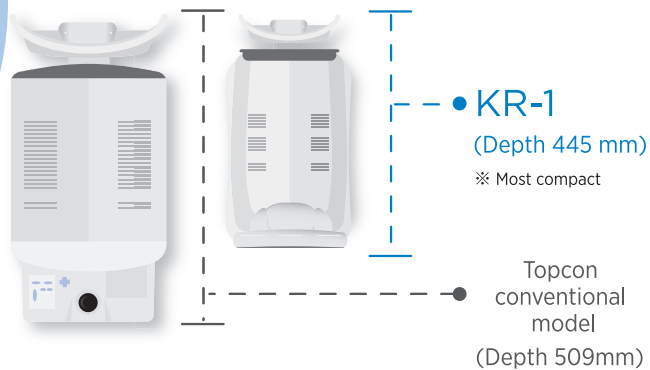
KR-1

## New Compact Ergonomic Design

The KR-1's new ergonomic design provides a more comfortable position for the patient with an inclined optical head (5°) and a new headrest design. ※  
The compact body enables easier access to patients.

※ By Topcon original investigation.

## Compact Body

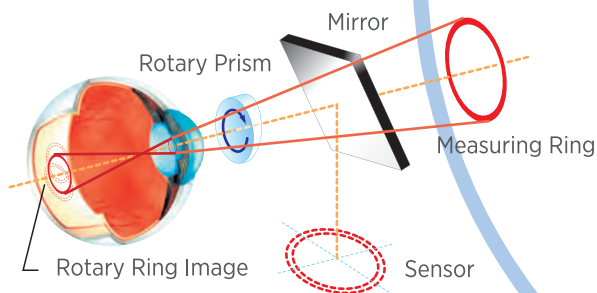


Peripheral Points

Corneal Apex

KRT Ring

Measuring Screen (Anterior Image)



## Reliable Measurement

### Peripheral KRT

The KR-1 allows the operator to take peripheral KRT measurements of the corneal curvature radius, in addition to inner KRT ring measurements, which is useful in corneal evaluation for contact lens fitting.

### Rotary Prism Measuring System

With Topcon's exclusive Rotary Prism Technology, the KR-1 also provides unmatched accuracy and reliability. The innovative optical design incorporated into the KR-1 allows for accurate and reliable measurements with pupil as small as  $\phi$  2mm.

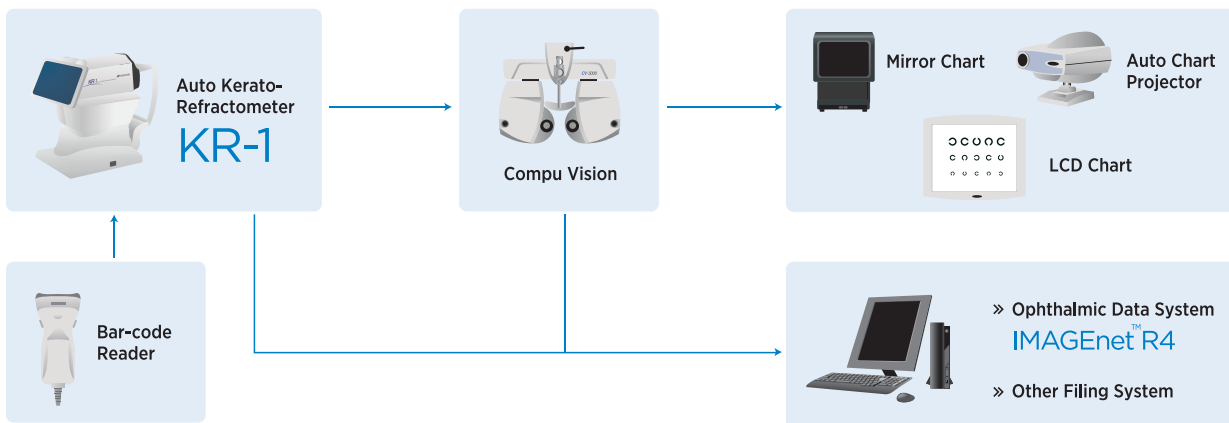


# Specifications

<b>Refractive Power Measurement</b>	Spherical refractive power: -25D to +22D (0.12D/0.25D steps) ※
	Cylindrical refractive power: 0D to ±10D (0.12D/0.25D steps) ※
	Astigmatic axial angle: 0° to 180° (1°/ 5°steps)
	Minimal measurable pupil diameter: φ 2.0mm
<b>Corneal Curvature Measurement</b>	Corneal curvature radius: 5.00mm to 10.00 mm (0.01mm step)
	Corneal refractive power: 67.50D to 33.75D (0.12D/0.25D steps) (corneal refractive index = 1.3375)
	Corneal astigmatic refractive power: 0D to ±10D (0.12D/0.25D steps)
	Corneal astigmatic axial angle: 0° to 180°(1°/ 5° steps)
<b>PD Measurement Range</b>	20mm to 85mm (1mm step)
<b>Data Transport Terminal</b>	USB (Import), RS-232C (Export), LAN (Export)
<b>Dimensions</b>	286~326m (W) × 445~526mm (D) × 466~615 mm (H)
<b>Weight</b>	19.0kg
<b>Power Supply</b>	100-240V AC, 50-60Hz, 75VA

※-25D ≤ spherical refractive power + cylindrical refractive power or spherical refractive power + cylindrical refractive power ≤ +22D

## System Chart



\* Contact Topcon subsidiaries or dealers for system configurations.



\*Subject to change in design and/or specifications without advanced notice.

**IMPORTANT**

In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.



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