NIDEK

Auto Ref / Keratometer

ARK-560A / 530A / 510A

The Art of Eye Care

Excellent Measurement Accuracy

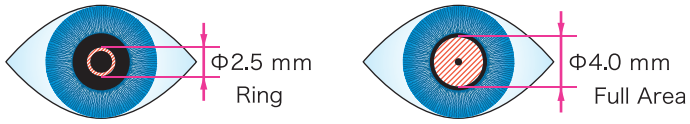
Highly Accurate Refractometer

The combination of new measuring principle - **Pupil Zone Imaging Method** - and unique technology - **SLD** - offers high accuracy and reliability in refraction measurement.

1. Pupil Zone Imaging Method

The NIDEK ARK-560A / 530A / 510A adopts the advanced **Pupil Zone Imaging Method** for refraction measurement, which analyzes a wider area (Max. ø4 mm) to obtain more reliable and realistic data that is closer to subjective refraction.

Measuring area comparison



Conventional ARK

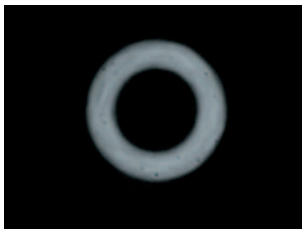
ARK-560A / 530A / 510A

2. SLD (Super Luminescent Diode)

The ARK-560A / 530A / 510A uses the **SLD (Super Luminescent Diode)** and highly sensitive CCD device for improved image quality. The images with the SLD are sharper and clearer than those with the LED, and the system offers greatly improved measurement capability even with dense cataract and IOL implanted eyes.

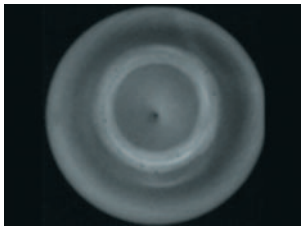
Comparison of image on CCD*

LED (Normal eye)

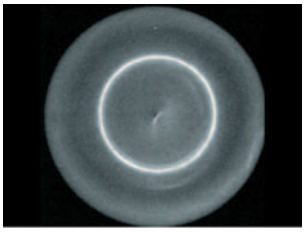


SLD (Normal eye)

LED (Cataract eye)



SLD (Cataract eye)

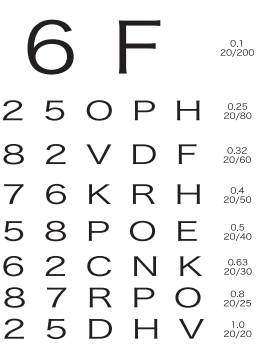


*In-house trial data (Model eye)

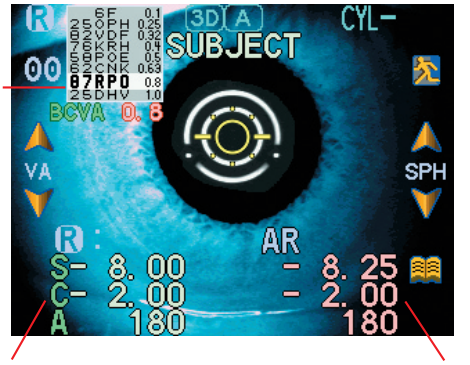
NIDEK's Innovative Auto Ref/Keratometer for Higher Precision and Better Operability.

*Unique VA Measurement**

The ARK-560A is the unique unit that provides visual acuity (VA) measurement. This function enables quick checkup of patient's refractive error by comparing subjective measurement with objective measurement. Even corrected visual acuity on near vision is measurable with easy operability, which allows proposal of progressive lens necessity.
*Only for the ARK-560A



VA Chart



Objective measurement values

Subjective measurement values

High Speed Printer with Easy Loading & Auto Cutter

The ARK-560A / 530A / 510A incorporates a high speed and user-friendly printer, and the printer paper can be changed easily.

Easy Paper Loading

Auto Cutter

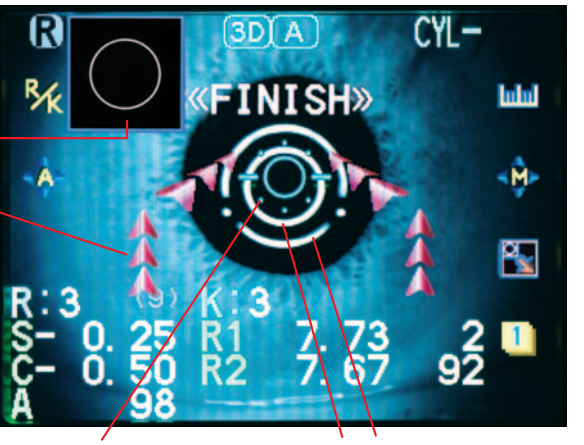
Printed data sheet is cut by the auto cutter for quick and easy detachment.

*Eye Care Card System**

The ARK-560A / 530A / 510A incorporates the card slot for the Eye Care card system, which provides quick and easy wireless data transfer.
*The card is optional.

Informative 5.7-inch Tiltable Color LCD

Clear image and data display with user-friendly guidance allow easier and more reliable operation.



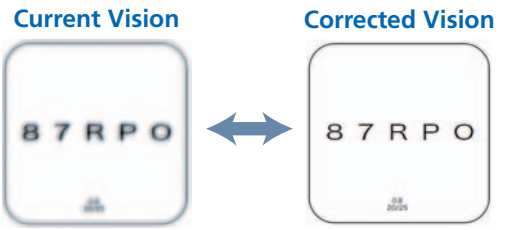
Tilting color LCD

The clear 5.7-inch color LCD with tilting function offers easy operation even for a standing operator.

Recall Function for Vision Comparison

A comparison between patients' current vision of unaided eye or glasses-corrected*1 eye and corrected vision with internal spherical and cylindrical lenses*2 can be easily demonstrated.

*1 Requires data transfer from a NIDEK auto lensmeter.
*2 Spherical and cylindrical lenses only for the ARK-560A
Spherical lens for the ARK-530A / 510A



Vision Comparison of the ARK-560A

Motorized Chinrest

The motorized chinrest with simple up / down button facilitates smoother operation.

One-Touch Lock

The main body can be fixed with the advanced one-touch lock.

Reliable Keratometer

The ARK-560A / 530A / 510A also offers high accuracy in keratometry measurement.

The system provides ordinary measurement (ø3.3 mm) using a mire ring, and also peripheral measurement (ø6 mm) using 4 points, both of which offer reliable and accurate keratometry data.
The ARK-560A / 530A / 510A uses double mire rings for better alignment and observation.

Projected double mire rings

■ *Wide Measurement Range: -30 to +25 D*

The ARK-560A / 530A / 510A offers the wide measurement range of -30 to +25 D.

■ *Small Measurable Pupil Size: ø2 mm*

The ARK-560A / 530A / 510A can measure small pupils down to 2 mm in diameter, allowing wider application.

■ *3D* Auto Tracking & Auto shot*

The auto alignment (X & Y directions), auto focusing (Z direction) and auto shot provide faster, simpler and more accurate measurements. When alignment is performed correctly, measurement starts automatically.

*3D : for the ARK-560A / 530A

Function / Model	Auto Tracking		Auto Shot
	X-Y-Z	Y	
ARK-560A	○		○
ARK-530A	○		○
ARK-510A		○	○

ARK-560A / 530A / 510A Specifications

Model	ARK-560A	ARK-530A	ARK-510A
Auto refractometer			
Measurement range	Sphere -30.00 to +25.00 D (VD = 12 mm) (0.01 / 0.12 / 0.25 D increments) Cylinder 0 to ±12.00 D (0.01 / 0.12 / 0.25 D increments) Axis 0 to 180° (1°/ 5° increments)	←	←
Measurable minimum pupil diameter	ø 2 mm		
Chart	Scenery chart		
Auto keratometer			
Measurement range	Radius curvature 5.00 to 13.00 mm (0.01 mm increments) Refractive power 25.96 to 67.50 D (n = 1.3375) (0.01 / 0.12 / 0.25 D increments) Astigmatism 0 to ±12.00 D (0.01 / 0.12 / 0.25 D increments) Axis 0 to 180° (1° / 5° increments)	←	←
Ordinary measurement area	ø 3.3 mm (R = 7.7 mm)		
Peripheral measurement area	ø 6.0 mm (R = 7.7 mm)		
Sagital radius measurement	25° each from the center (Superior side, Inferior side, Temporal side, Nasal side)		
VA measurement			
Measurement range	Less than 0.1, 0.1, 0.25, 0.32, 0.4, 0.5, 0.63, 0.8, 1.0 or Less than 20 / 200, 20 / 200, 20 / 80, 20 / 60, 20 / 50, 20 / 40, 20 / 30, 20 / 25, 20 / 20	Not available	Not available
Correction range	Sphere -20.00 to +20.00 D (VD = 12 mm) (0.25 D increments) Cylinder 0 to ±8.00 D (0.25 D increments) Axis 0 to 180° (1° / 5° increments)		
PD measurement range	30 to 85 mm (1 mm increments) (Near point PD: 28 to 80 mm at WD = 40 cm)	←	←
Corneal size measurement range	10 to 14 mm (0.1 mm increments)	←	←
Pupil size measurement range	1 to 10 mm (0.1 mm increments)	←	←
Auto tracking / Auto shot	X-Y-Z directions Auto shot	←	Y direction Auto shot
Vision comparison	Corrected vision with spherical and cylindrical lenses	Corrected vision with spherical lens	←
Display	Tiltable 5.7-inch color LCD	←	←
Printer	Built-in thermal type line printer (Easy loading and auto cutter)	←	←
Interface	RS-232C (IN / OUT), LAN, USB, Eye Care card system* *Card is optional	←	←
Power supply	AC 100 to 240 V 10% 50 / 60 Hz	←	←
Power consumption	100 VA	←	←
Dimensions / Mass	260 (W) x 481 (D) x 455 (H) mm / 20 kg 10.23 (W) x 18.93 (D) x 17.9 (H) " / 44.1 lbs.	←	←
Standard accessories	Printer paper, Power cord, Dust cover, Chinrest paper, Fixing pins, Model eye	←	←
Optional accessories	Interface cable, Barcode scanner, Magnetic card reader	←	←

Caution : U.S. Federal Law restricts this device to sale, distribution and use by or on the order of a physician or other licensed eye care practitioner.
Specifications and design are subject to change without notice.

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