

# NEW KR-800S Auto Kerato-Refractometer with subjective & glare testing



**5** IN **1**

- Accurate objective measurement (REF, KRT, R/K)
- Subjective VA measurement for far and near distance
- Glare test
- Grid test
- Contrast test

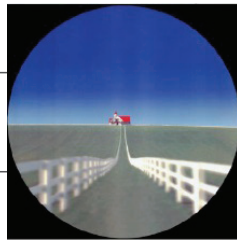
PERFORMANCE  
YOU CAN COUNT ON

# KR-800S 5-in-1 Auto Kerato-Refractometer

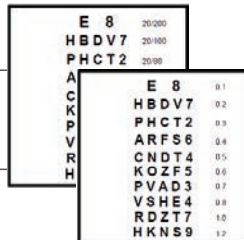
Topcon is proud to introduce the KR-800S Auto Kerato-Refractometer.

It incorporates Topcon's exclusive Rotary Prism technology to allow for unparalleled precision and reliability. Furthermore, the KR-800 "S" is special in its ability to measure subjective VA for both far & near distance and also features additional subjective test modes including a glare test, grid chart test and contrast test.

1 Accurate objective measurement



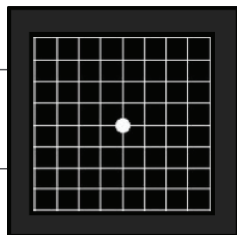
2 Subjective VA measurement for far & near distance



3 Glare test



4 Grid test



5 Contrast test



# Easy to see & operate

## Wide 8.5-inch Touchscreen Control Panel

A wide 8.5 inch color touchscreen panel features clear, easy-to-read icons.



## Smooth Movement

Topcon's latest engineering techniques have reduced the weight of the KR-800S by 23% compared to KR-800. This contributes to a smoother operation of the unit, a more fluid measuring process and more accurate results.



## Easy Load Printer

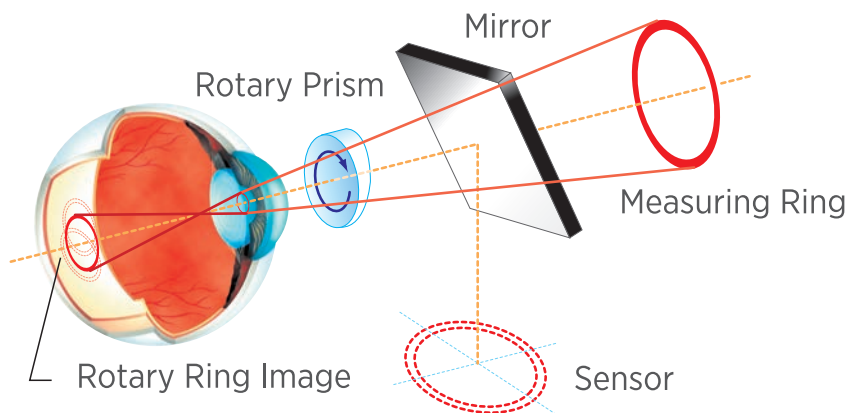
There is no need to feed paper through the roller. Just drop the paper in and print.



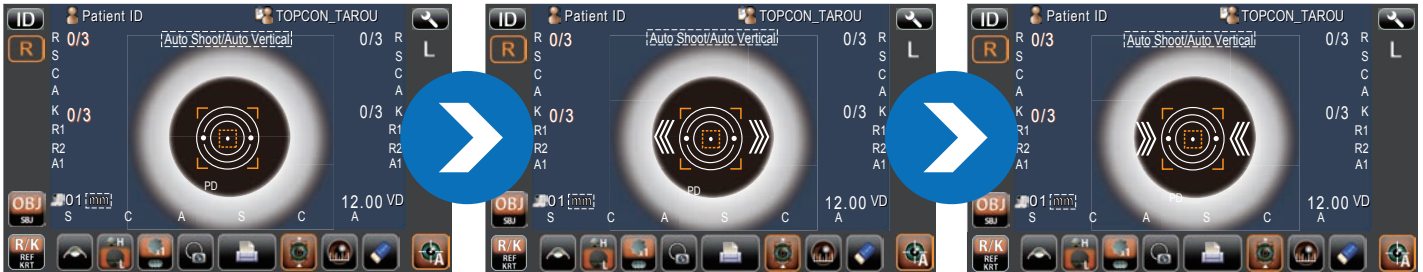
# Exclusive Topcon Rotary Prism Technology

## Unique Technology for Unparalleled Accuracy

The unique Rotary Prism Technology, exclusive to Topcon, allows for unparalleled precision and reliability. This system measures an area of the retina while permitting measurements through pupils as small as 2mm in diameter.



# 1 Objective Measurement



## Step 1

Check that [OBJ] button is highlighted in orange.

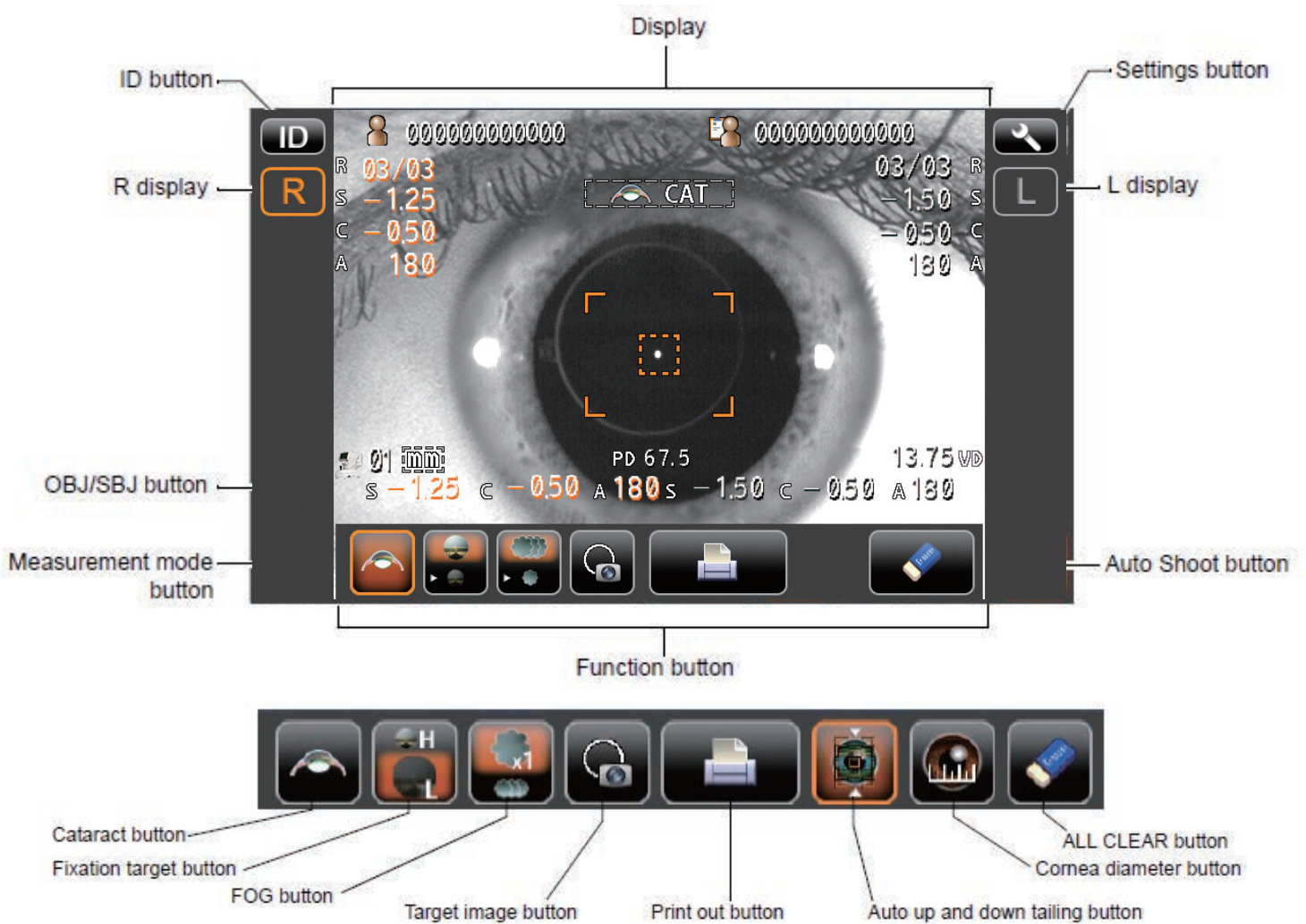


## Step 2

Using the omni-directional joystick, align the white dot in the center of the orange box.



## Step 3

When the alignment arrows disappear, the auto shoot function is performed.



# 2 Subjective VA Measurement for Far & Near Testing


## Step 1

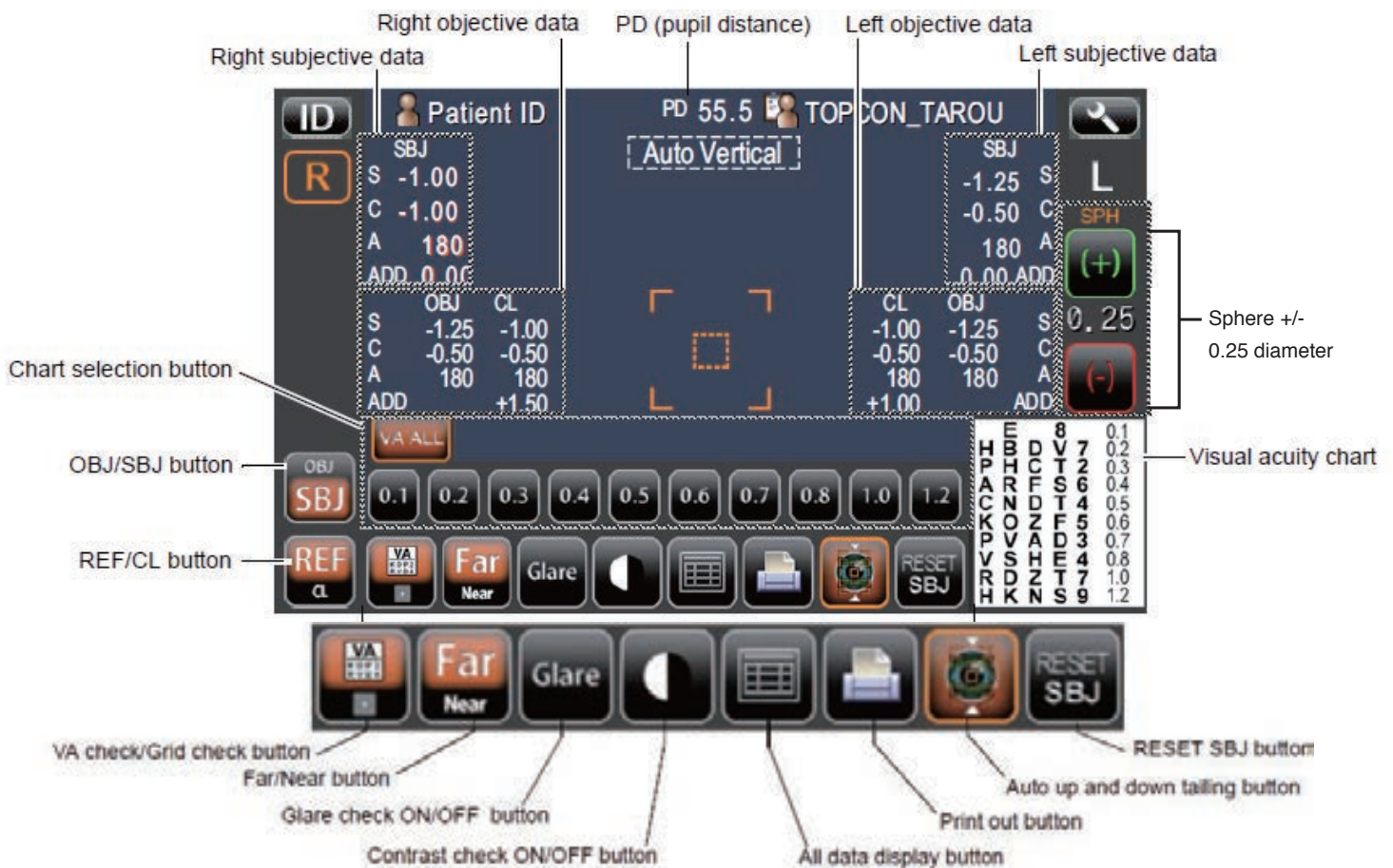
Check that the [SBJ] button  is highlighted in orange. Select whether to measure far or near distance visual acuity. 

## Step 2

By selecting the [REF] or [CL] button,  you can check a patient's visual acuity using values from the KR-800S or a connected topcon computerized lensmeter. The spherical lens can be changed in 0.25D steps.

## Step 3

Change the visual acuity chart by tapping the chart selection button. Ask the patient to read the lowest possible line. When the visual acuity value is determined, tap the "VA" button. 

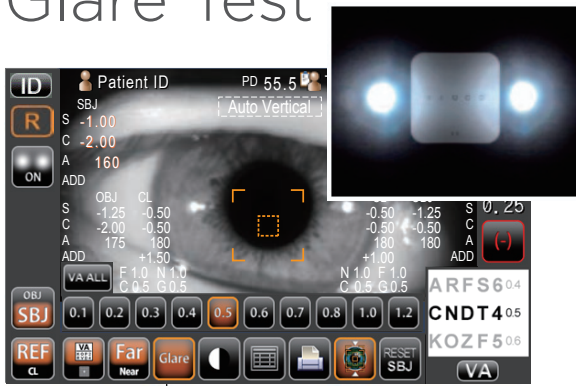


\*Changeable near distance is 33cm, 40cm, 50cm or 60cm.



When the Topcon brand lensmeter is connected, the data measured with the lensmeter is displayed on the CL data.

\*If no lensmeter data exists, the "NoCL" sign and "0.00" are displayed.

# 3 Glare Test\*

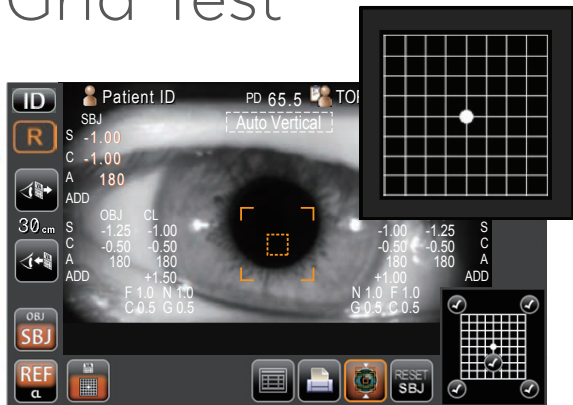


Glare check ON/OFF button

Tap the “Glare” button  to activate the Glare test. Once visual acuity is determined, tap the “VA” button and the value is displayed. 


\*Glare test is only available when subjective far distance measurement is selected.

# 4 Grid Test\*\*



VA check/Grid check button

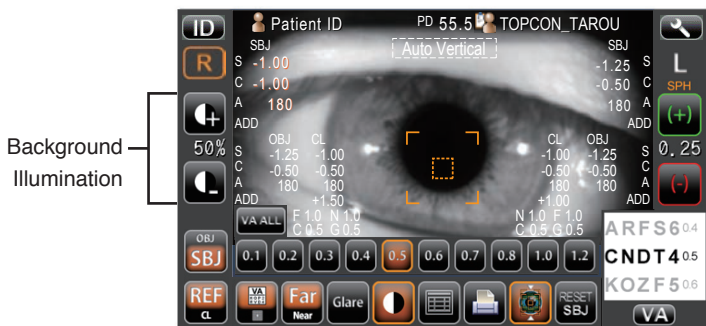
Grid chart

Tap the “VA check/Grid check” button  and a grid chart will appear onscreen. Instruct the patient to look at the center of the grid as well as the four corners of the grid. Ask the patient if the grid is blurry, dim or missing lines.

Tap the position(s) on the grid that corresponds to the patient’s answer. Once the test is complete, open all data display and the results of the grid test will be displayed.


\*\*Grid test is only available when subjective near distance measurement is selected.

# 5 Contrast Test\*\*\*



Background Illumination

Contrast check ON/OFF

Tap the “Contrast” button  and the background illumination button will appear on the left side of the control panel. Adjust the contrast by pressing the + or - buttons until you obtain the lowest contrast value that the patient can read (their current subjective VA). The contrast % can be changed from 2.5% ~ 100%.

\*\*\*Contrast test is only available when subjective far distance measurement is selected.

# Printout Sample

## Objective Measurement

Bar code

Work ID No.

Operator ID

Patient No. (Patient ID when patient ID is input)

Device ID number

Serial number

VD (vertex distance)

Cylinder sign

3 readings of REF right measurement (recordable up to 10 measurements)

Typical value of right eye

SPHERICAL EQUIVALENT of right eye

The ( ) mark is added when measurement values are not fully reliable.

Near vision PD value

ADD (standard addi-

Pupil distance (PD value) (mm)

Refractive power measurement result (L)

Refractive power measurement result (R)

Reliability factor

C (Cataract mode) mark

## Subjective Measurement

Subjective Far VA value

Subjective Near VA value

Grid test result

Glare test result

Contrast test result

Far VA for lens meter \*

Near VA for lens meter \*

Glare test VA for lens meter \*

Contrast test VA for lens meter \*

DIST: Near check distance

LVL Contrast level



# Technical Specifications

## Objective Refractometer Mode

- Sphere Range • -25 to +22D (0.12D/0.25D steps) \*1
- Cylinder Range • 0D to 10D (0.12D/0.25D steps) \*1
- Axis Range • 0° to 180° (1°/5° steps)
- Minimum Measurable Pupil Diameter •  $\varnothing$ 2mm

## Corneal Curvature Mode

- Corneal Curvature Radius • 5.00mm to 10.00mm (0.01mm display unit)
- Corneal Refraction • 67.50D to 33.75D (0.12D/0.25D steps)
- Refraction Index • 1.3375
- Corneal Astigmatism • 0D to 10D (0.12D/0.25D steps)
- Corneal Astigmatism Axial Angle • 0 to 180° (1°/5° steps)

## Subjective Measurement Mode

- Sphere Range • -18 to +18D (0.25D steps) \*2
- Cylinder Range • 0D to 8D (0.25D steps) \*2
- Axis Range • 0° to 180° (1°/5° steps)

## Others

- PD Measurement Range • 20-85mm (0.5mm display unit)
- Input/Output • USB(for Import), RS-232C(for Export), LAN(for Export)

## Other Specifications

- Dimensions • 317-341mm(W) Q 521-538mm(D) Q 447-477mm(H)
- Weight • 16kg
- Power Supply • 100-240V AC, 50-60Hz

\*1 -25D  $\leq$  spherical refractive power + cylindrical refractive power or spherical refractive power + cylindrical refractive power  $\leq$  +22D

\*2 -18D  $\leq$  spherical refractive power + cylindrical refractive power or spherical refractive power + cylindrical refractive power  $\leq$  +18D



\*Not available in all countries, please check with your distributor for availability in your country

\*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.



TOPCON CORPORATION



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