

# CV-5000PRO

Automated vision tester



Comfortable and versatile operation

# CV-5000PRO automated vision tester is the heart of your refraction system

## CV-5000PRO

The CV-5000PRO offers various operation interfaces such as a Topcon KB-50S controller, a tablet, an integrated PC in the CV-5000PRO or an external PC. The CV-5000PRO's automated vision tester head provides fast and silent lens rotation for user and patient comfort.

The CV-5000PRO is connectable to other refraction instruments. Data import and export can be done through a direct connection with these instruments, or through database software, such as Topcon IMAGENet.



## CV-5000PRO vision tester

- | Small and compact design
- | High speed lens disk rotation
- | Near vision LED illumination
- | Tilting function for near vision test

## Small and compact design

The small and compact design allows perfect interaction with your patient.

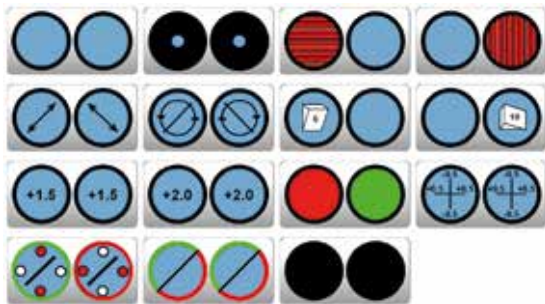
## High speed lens disk rotation

Efficient lens disk rotation reduces ocular stress as well as confusion for the patient.

The total refraction is reduced significantly.

## Versatile auxiliary lens pack

A variety of available auxiliary lenses ensures a professional subjective refraction examination.



Auxiliary lenses CV-5000PRO vision tester

## Near vision LED illumination

LED illumination from the CV-5000PRO vision tester provides bright illumination of the near test chart.

The use of external illumination is no longer required.



Near vision LED

## Tilting function for near vision test

To provide a natural and comfortable reading position during the near vision test, the CV-5000PRO vision tester can be tilted within a wide range.

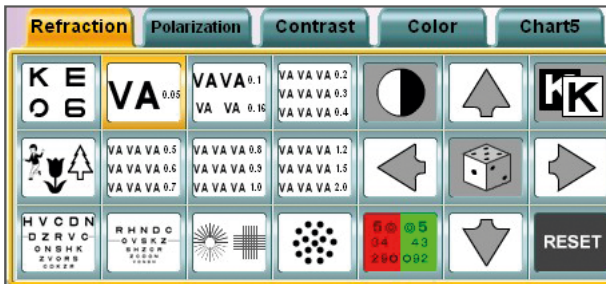


## CV-5000PRO operation

- | KB-50S, 1-dial control
- | Mouse & monitor control
- | CV-5000PRO tablet control



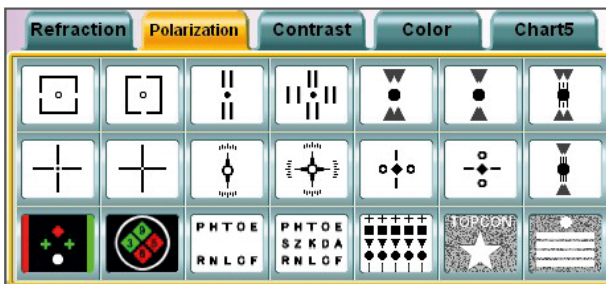
# CV-5000PRO Features



## Large 10.4 inch color LCD touch screen

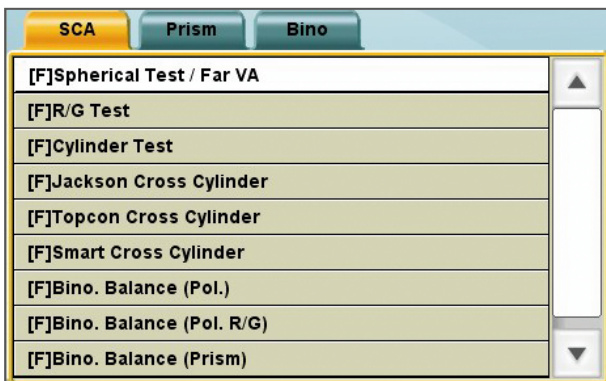
The large color screen provides a clear display of examination data. All relevant data, such as lens meter data and objective data can be viewed at a glance.

The touch screen ensures quick and easy access of various refraction functions.



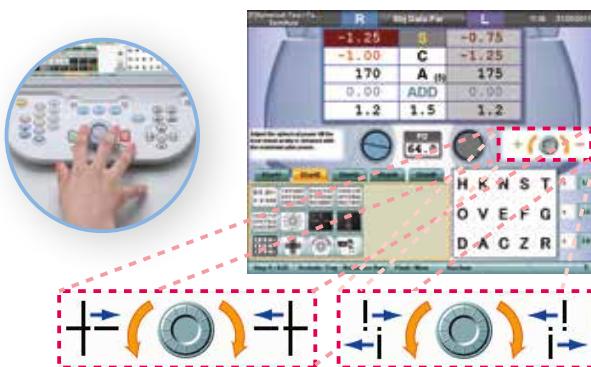
## Personalized display lay out

The KB-50S incorporates all the charts which are available in all Topcon computerized chart systems, such as CC-100XP. Depending on your personal preference and on the selected computerized chart system, test charts are displayed on five tab pages. The lay out of these five tab pages can be defined by the user.



## Predefined examinations

The KB-50S provides predefined examinations to correct the spherical, cylindrical refraction as well as phoria tests and binocular function tests.



## 1-Dial navigation help

The 1-dial button is used to finetune several procedures such as axis rotation, adjusting refractive power etc. The 1-dial navigation helps to indicate the rotation direction of the 1-dial according to the responses of the patient.

# CV-5000PRO Control options

The CV-5000PRO subjective refraction system can be controlled in various ways. Beside the KB-50S 1-dial controller, the system can be controlled by an iPad tablet and two ways through the use of mouse and monitor.



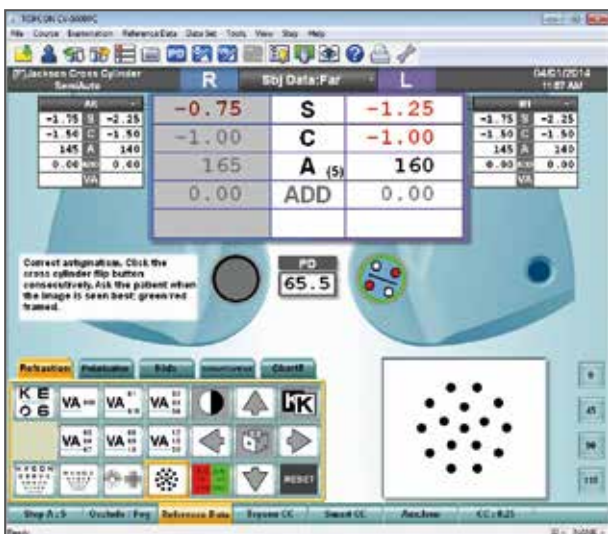
## KB-50S 1-dial controller

The KB-50S is a dedicated controller for the CV-5000PRO vision tester. This controller enables an easy and intuitive operation of the CV-5000PRO. The buttons are ergonomically placed with a 1-dial button in the centre of the KB-50S, combined with a large LCD touch screen.



## Operating software on the integrated PC

Instead of the KB-50S as a controller using the software on the integrated CV-5000PRO system PC, you can also simply connect a mouse and LCD monitor. In this way the user interface which normally is displayed on the KB-50S dedicated controller is now displayed on a LCD monitor. All functionalities are similar to the KB-50S controller.



## Operating software on an external PC

A unique feature is controlling the CV-5000PRO vision tester through the use of your own personal computer which enables you using other software simultaneously.



# CV-5000PRO Control options

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## CV-5000 tablet, wireless control

The CV-5000PRO vision tester can stand alone controlled with a tablet or the tablet can be used simultaneously with the KB-50S 1-dial control. Using the same CV-5000PRO software user interface makes it possible during subjective examination to switch easily between the use of the KB-50S 1-dial controller and the wireless tablet in an instant.

## Seamless integration with chart screen or projector



## CC-100 series

The CC-100 and CC-100XP LCD led chart systems are versatile solutions to present optotype charts to patients. The high resolution LED LCD ensures clear and bright chart display. All commonly known acuity tests are available, including ETDRS, spatial frequency contrast test and HRR color test. The CC-100XP offers additionally polarization. The CC-100 series are fully integrated in the CV-5000 user interface, which means that they are fully controllable through the CV-5000PRO controllers such as KB-50S and tablet.



## ACP-8 Auto chart projector

The Topcon ACP-8EM auto chart projector provides improved sharp and clear image projection and fast chart rotation. A remote controller allows instant projection of the 30 test charts at a rate of 0.03 seconds per frame. In addition, the ACP-8EM chart projector offers optotype charts with a wide projection size (330 x 270 mm) for fast and efficient testing. The ACP-8 is fully integrated in the CV-5000PRO controller interface.

## Data import & export functions



### Easy operation by networking

CV-5000PRO is able to receive refraction data from other Topcon instruments, such as refractometers and lensmeters, so that an operator is able to log this data rapidly on to the control monitor at the start of an examination. Automatic data transfer avoids mistakes associated with manual typing and makes the routine more efficient. An efficient workflow has benefits as well as for your patients as for your practice.



### Integration in IMAGEnet series/ other software

The CV-500PRO software integrates with the IMAGEnet system\*. Subjective, objective and lensmeter data can be transferred from the CV-5000PRO system to the IMAGEnet system and assigned to a patient. The CV-5000PRO enables also the export of data to other software within the practice.

\* IMAGEnet software is optional

## More choice for your system

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### **KR-800 series**

Auto Kerato-Refractometer

(KR-800 / KR-800A / KR-800S)

- | Auto Kerato-Refractometer with objective and subjective testing (KR-800S)
- | 3D Auto alignment function allows quicker and easier measurement (KR-800A)
- | Smooth operation
- | 8.5 inch wide touch screen control panel
- | Compact designed body
- | Easy set up with a LAN network



### **KR-1**

Auto Kerato-Refractometer

- | Simple and quick operation
- | Easy to use color touch screen control panel
- | Flexible and space saving layout
- | Compact and ergonomic design
- | Reliable measurement



### **TRK-2P**

Auto Kerato-Refracto Tonometer

- | Refractometer, Keratometer, Non-Contact Tonometer and Pachometer in one single instrument
- | Fully automated
- | Rotating touch screen control panel
- | Compact and modern design
- | Easy manual alignment with new control lever accessory



# CV-5000PRO sales support

CV-5000PRO provides a sales support, through which the operator can advise the customer which type of lens is most beneficial to fulfil their needs. Clear images display the view for

different lens types, single vision, mid range progressive and full range progressive lenses. Lens type selection is made easier and more time saving.

## Vision of progressive lens



Far-near



Middle-near



Near-near



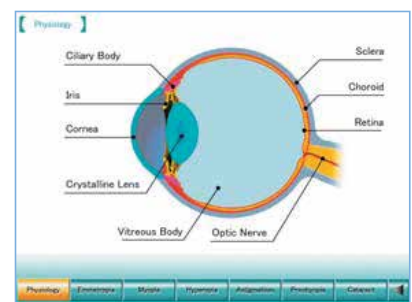
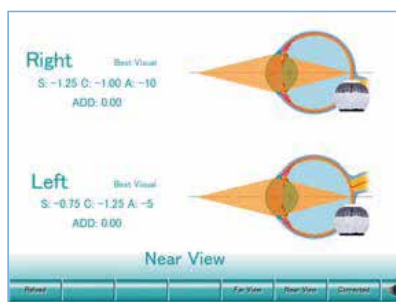
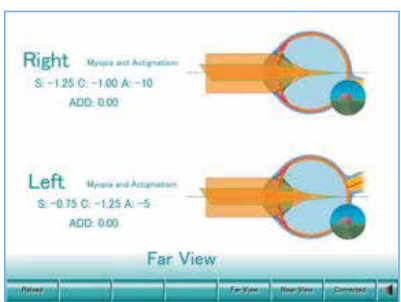
Single focus

## Vision of progressive lens



## Patient information

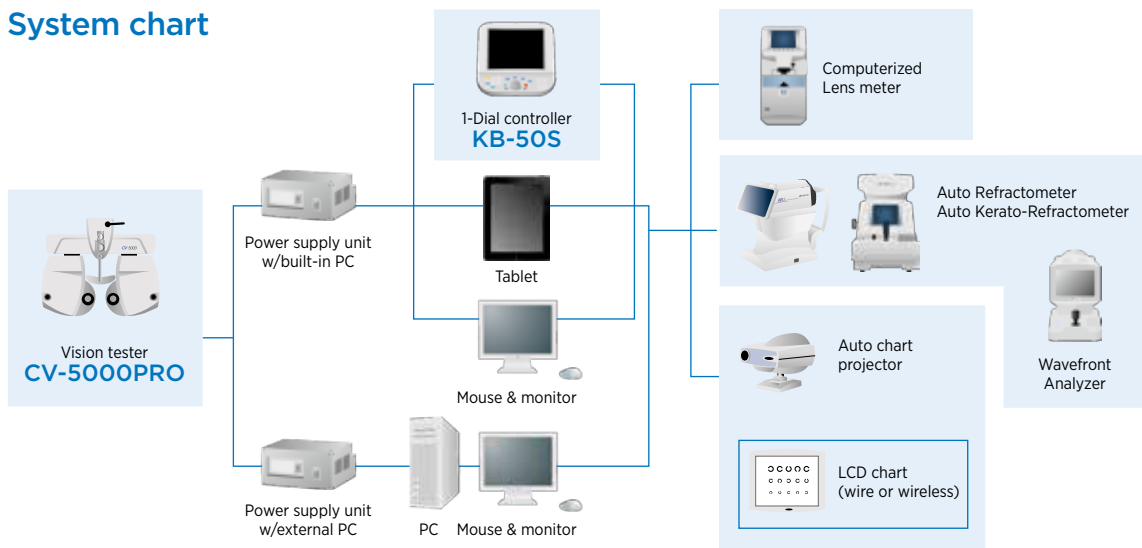
Patients like to know why they need glasses. The animated patient information provides a clear understanding to the patient.



## Specifications

<b>Spherical power</b>	<b>Measuring range</b> <b>Measuring step</b>	+27.00D to -27.00D 0.25D/3.00D
<b>Cylinder power</b>	<b>Measuring range</b> <b>Measuring step</b>	+8.00 to -8.00 0.25D/1.00D
<b>Cylinder axis</b>	<b>Measuring range</b>	0° to 180°
<b>Cylinder axis</b>	<b>Measuring step</b>	1°/5°/15°
<b>Prism</b>	<b>Measuring range</b> <b>Measuring step</b>	0 to 20 Δ (all direction) 0.1 Δ/0.2 Δ/0.5 Δ/1.0 Δ/
<b>Pupillary distance</b>	<b>Measuring range</b> <b>Measuring step</b>	48 to 80 mm 0.5 mm/1.0 mm
<b>Cross cylinder</b>	<b>Jackson Cross cylinder</b> <b>Auto Cross cylinder</b>	± 0.25D ± 0.50D ± 0.25D
<b>Test lens (Aux lens)</b>	Red-green filter, polarizing filter (45°/135°), prism (6 Δ/ 10 Δ), red maddox (horizontal/vertical), lens for retinoscopy (+1.5D/+2.0D), cross cylinder for measuring presbyopia (± 0.50D), occluding plate, pinhole, and cross hairs glass.	
<b>Reference eyeglass wearing distance</b>	12 mm, 13.75 mm, 16 mm, 18 mm, 20 mm	
<b>Convergence</b>	Near-point distance 40/67 cm (Minimum papillary distance at near-point 40 cm convergence: 53 mm)	
<b>Dimensions and weight</b>	<b>Measuring head (Non arm-mounted type)</b> <b>Measuring head (Arm-mounted type)</b>	294-328 mm (W) x 115 mm (D) x 261 mm (H), 4.0 kg 294-328 mm (W) x 115 mm (D) x 324 mm (H), 4.6 kg
	<b>Accessories</b> <b>Power supply unit W/External PC (PS-unit)</b> <b>Power supply unit W/Built-in (PS-unit)</b> <b>1-Dial controller KB-50S</b> <b>Infrared communication unit</b> <b>Communication cable (DIN/D-sub)</b>	276 mm (W) x 197 mm (D) x 117 mm (H), 2.7 kg 276 mm (W) x 197 mm (D) x 117 mm (H), 3.9 kg 300 mm (W) x max 250 mm (D) x max 200 mm (H), 2.3 kg 215 mm (W) x 215 mm (D) x 55 mm (H), 113 gr 170 mm (W) x 100 mm (D) x 30 mm (H), 128 gr

## System chart



### IMPORTANT

Subject to change in design and/or specifications without advanced notice.  
In order to obtain the best results with this instrument, please be sure to review all user instructions prior to operation.  
Medical device Class I. Manufacturer: Topcon Corporation.



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