

Every so often something happens
to change a Profession forever.

This is the moment for yours.



Announcing the world's first automated subjective refraction system.

- Simultaneous binocular objective refraction
- Interactive defined subjective refraction
- Clinically proven - accurate and repeatable results*
- Pre-selectable & customisable operating modes
- Facilitates an increase in the scope of clinical practice
- High patient acceptability
- Provides multi-language support for your patients

*Data available

Incorporates the highest possible standards. Yours.

Developed in conjunction with a number of the world's leading, Ophthalmologists and Optometrists, the BV-1000 from Topcon is the first binocular interactive subjective refraction system.

Using intelligent software technology coupled with Topcon's unique binocular objective refraction system, the BV-1000 delivers a wide range of professional and clinical benefits that enhance clinical care, practice efficiency and increase profitability.

Designed and developed to provide accurate and repeatable results. Every time.

Many years of ongoing development and practice based clinical trials have delivered an instrument that provides accurate and repeatable results.

Subjective refraction is a complex procedure that requires the clinician to make many intricate decisions based on direct and indirect subject responses. The BV-1000 uses an intelligent interactive software system that modifies the test procedures based on subject's responses.

As a result of intense research and development the BV-1000 has a host of algorithms that have been developed to ensure that the accuracy and repeatability of the unit is comparable to that of a clinician.*



Improves practice efficiency and increases patient care.

With the advent of automated subjective refraction little or no modification is required to the prescription produced by the BV-1000 consequently this will improve practice efficiency and increase profitability.

The delegation of subjective refraction will result in you, the clinician, being able to utilise your professional skills to perform a wider range of diagnostic and investigative techniques, which facilitates an increase in the scope of clinical practice.

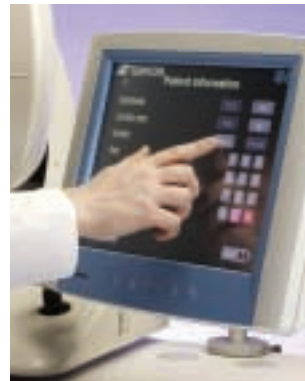
Proven patient acceptability delivers the ultimate automated solution.

Many years of practice based clinical testing on a wide variety of patient groups has resulted in the BV-1000 being optimised to provide high patient acceptability and repeatability during the refraction process.

Based on actual patient feed back, acceptability and cooperation during the refracting process has been proven to be extremely high, with over 98% of patients in the initial clinical trial finding the test protocol simple to understand.



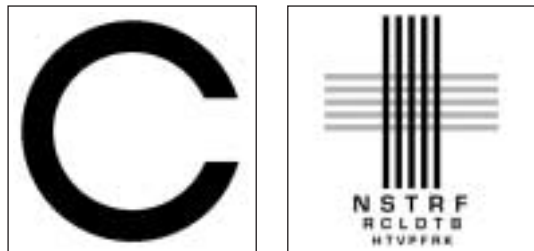
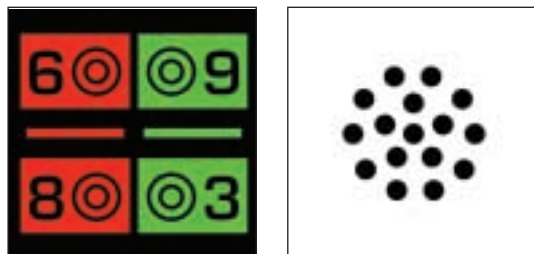
Patient response button and joysticks can be configured for right or left hand use and touch screen technology allows simple operation and data entry



The BV-1000 permits links to a wide range of practice instruments and external software packages

Clinical & Patient Evaluation

Conventional test charts are employed throughout the BV-1000 test process

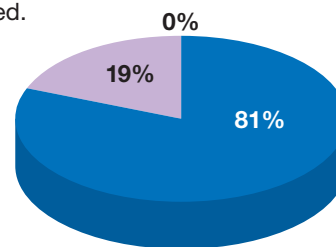


Patient perceptions

A wide range of BV-1000 patients were questioned about various aspects of the test process and their initial perception were represented.

Do you trust the results from the test?

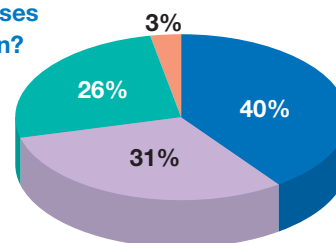
- Yes
- Not sure
- No



Patient confidence in the results produced by the BV-1000 show that 81% of subjects 'trusted' the results. More importantly, none of the subjects stated that they did not trust the results.

Would you purchase glasses based on this prescription?

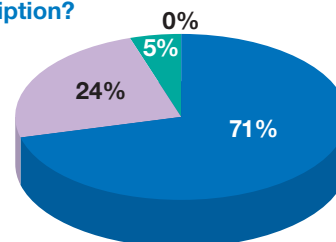
- Definitely
- Probably
- Possibly
- Definitely not



Of the 81% of subjects who 'trusted' the results, 40% would actually use this prescription to purchase spectacles and 31% probably.

Would you purchase glasses if the practitioner confirmed that you could see to the recommended standard with this prescription?

- Definitely
- Probably
- Possibly
- Definitely not



With practitioner intervention making minimal modifications to the BV-1000 results 71% of patients would purchase spectacles and 24% responded that they would probably purchase spectacles.

Technical Specifications

Measuring Range

Objective refraction measurement (Simultaneous binocular refraction)

Hyperopia	0D to +22D (0.25D step)
Myopia	0D to -25D (0.25D step)
Cylinder	0D to -8D (0.25D step)
Axis	1 to 180° (1° step)

Subjective measurement

Hyperopia	0D to +18D (0.25D step)
Myopia	0D to -18D (0.25D step)
Cylinder	0D to -8D (0.25D step)
Axis	1 to 180° (1° step)

Corneal curvature measurement (Simultaneous binocular refraction)

Measuring range	5.00 to 10.00mm(0.01mm step) Corneal curvature radius
Corneal refraction	67.50 to 33.75D (0.12D/0.25D step) Corneal refraction factor = 1.3375
Corneal astigmatism	0 to -10D (0.12D/0.25D step)
Corneal astigmatism axis	1 to 180° (1° step)

Astigmatism mode Minus display

Vertex distance Variable

Minimum pupil size for measurement 2.0mm

Fixation target Automatic fogging

Alignment R&L simultaneous automatic alignment.

PD measurement range 50 - 80mm (1mm step)

Subject to change in design and/or specifications without advance notice.

Charts

Objective measurement	Picture chart
Subjective measurement	Near Point chart
	Red & Green chart
	Cross Cylinder chart
	Cross Phoria chart (Screening only)
	Single Landolt ring charts:
	Total 41 charts
	VA 0.1 0.13 0.16 0.2 0.25 (5 steps) (2 kinds each: Total 10 charts)
	VA 0.32 (1 step) (3 kinds: Total 3 charts)
	VA 0.4 0.5 0.63 0.8 1.0 1.25 1.58 (7 steps) (4 kinds each: Total 28 charts)
	LogMAR Step

Patient operation lever 4 direction and trigger button on top.
(located both right and left side of Patient. Patient can use either of these.)

Patient instruction By computer voice narration through speaker or head phone (head phone outlet available)
Patient instruction available on PC screen before measurement.

Chin & headrest Motorised chinrest.
Headrest with monitoring button.

Size W840 H630 D496 (mm)

Weight 60kg

Narration Adaptable to local languages formats

Power consumption 120VA

Voltage 100~120V / 230V



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Certificate No. Q19951
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Certificate No. EC07J1061
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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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