Ophthalmometer OM-4





CONNECTING VISIONS

Ophthalmometer

OM-4

A professional for precise objective measurements of the corneal radius of curvature plus accurate measurements of the radius of curvature of contact lenses compactly-designed and very easy to use by one hand operation.



1 Protractor scale

Indicates the axis of astigmatism.

2 Adjustable eyepiece

Adjustable from -5 to +5 diopters to correct for operators spherical error.

3 Vertical knob

Is revolved to coincide the + and -l- marks of the mire images for finding the radius of curvature of the vertical axis.

4 Horizontal knob

Is revolved to coincide the I and I marks of the mire images for finding the radius of curvature of the horizontal axis.

5 Axis rotating handle

Must be turned to locate the axis of astigmatism when there is horizontal displacement of the + an the l mire images.

6 New, Omni directional Joystick for unprecendented Maneuverability

Easy, one-handed vertical, horizontal, diagonal adjustment improves performance while decreasing fatigue. This is only one of the new features that makes the Topcon Om-4 highly desirable ophthalmascopic equipment for the busy practitioner. 7 Intensity switch

Adjusts briliance of lamp

8 Power switch

9 Occluder

Helps to maintain fixation by blocking of non-measured eye. 10 Leveling pin

11 Chin-rest adjustable knob

Height of chin rest ad-justable for accurate positioning.







Contact lens measurement

Replace the chin-rest with the supporting column and place the contact lens holder, with the contact lens attached to it, on top of the column. It will be possible to measure the radius of curvature of the concave or convex face, depending on which faces the instrument, in the same manner as when measuring the cornea.



The OM-4 features easy to align mire images with:

All readings are thus placed in one field of view, greatly simplifying and speeding up measurements. (Example: the diagrams on the right show mire images in perfect focus and without astigmatism, with radius of curvature 8.0 mm and vertex power 42.2 diopter on both vertical (V) and horizontal (H) axes). Extended range of curvature readings possible from 5.5 mm to 12.0 mm.

Readings when astigmatism is not present

Vertical and horizontal knobs are rotated to eliminate displacements in the + and -l- marks (vertical axis) and the l and ' marks (horizontal axis) of the mire images, which will give speedy readings for both vertical and horizontal axes at one position, when corneal astigmatism is non-existent (see image 1).

Readings when astigmatism is present

Displacement of the + and -l- marks in the horizontal plane indicates existence of corneal astigmatism. Rotate the axis rotating handle around tis optical axis, to eliminate the displacement. Then, eliminate further displacements of the marks with the vertical and horizontal knobs, as shown above in non-astigmatic corrections, which will give the readings for corneal astigmatism (see image 2).

Features

Internal scale reading system.

Besides the mire images, the milimeter scales for the radius of curvatre and the diopter scales for the corneal refractive power, of both vertical and horizontal axes are viewed at all times in the field of view, this greatly speeding up measurements.

- Measurement of corneal astigmatism. Horizontal displacement of the mire images indicates existence of astigmatism and the axis rotating handle is used to coincide the measuring head with the axis, after which the vertical and horizontal knobs are used to coincide the mire images, showing the great ease and simplicity of one position measurement.
- One position measurement is not only more accurate but is truly effective in reducing measuring time and also helps promote patient's cooperation.

Specifications

Туре	Sutcliff type
Scales	
Corneal radius of curvature	5.5 to 12 mm
Minimum reading	0.01 mm
Corneal refractive power	28.00 to 60.00 dptr.
Minimum reading	0.125 dptr.
Axis of corneal astigmatism	0 to 180°
Minimum Reading	1°
Diopter adjusting scale	0 to \pm 5dptr.
Power	
Primary	AC 100V, 120 V, 220 V and 240 V, with built-in transformer 50/60 Hz
Power consumption	30 W
Dimensions	560 mm wide x 580 mm high x 460 mm deep
Weight	16 kgs.

Optional Accessory



Adjustable Instrument Table AIT-16



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.

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