

Product Specifications

Product Name	LED Direct Ophthalmoscope BXa13LED, BXa13ALED
Generic Name	Direct Ophthalmoscope
Illumination Source	High color-rendering incandescent LED
Correction Range	-36 D to +35 D (in increments of 1 D)
Filters (Illumination system)	Polarizing filter, Red-free filter
Observation Polarizing Filter	ON/OFF
Illumination Dial	Normal aperture, Small aperture, Slit, Concentric scale, Cobalt blue filter
Batteries	(BXa13LED) 2 pcs. C-size alkaline batteries (rated voltage 3.0V) (BXa13ALED) 2 pcs. AA-size alkaline batteries (rated voltage 3.0V)
Maximum Power Consumption	Below 3W (C-size battery) / below 1.5W (AA-size battery) (with Head attached)
Dimensions (excluding protrusions) and Weight	(BXa13LED) 45(W)×223(H)×34(D) Approx. 290g (including C-size batteries) (BXa13ALED) 45(W)×223(H)×31(D) Approx. 195g (including AA-size batteries)
Practical Continuous Use Time	Approx. 20 hours (C-size battery), Approx. 10 hours (AA-size battery)

Accessory

Carrying case



Related Products

Ophthalmo-Retinoscope Set
BXa13RXLED / BXa13ARXLED

A convenient set of Ophthalmoscope BXaLED Head and Streak Retinoscope RXLED Head compatible with the C-size Battery Handle or AA-size Battery Handle. (The photo below is the set with the C-size Battery Handle.)



The Features of LED Direct Ophthalmoscope BXaLED

Basic Functions



2-3 TIMES Brighter Illumination Field
Two to three times brighter than our halogen bulb models.

SMOOTH Smooth Illumination Control
Smooth stepless light control from the minimum to the maximum. Reduces the burden of the patient caused by photophobia. Clear fundus observation.

BOOST Boost Mode for More Brightness
Switchable between normal mode and much brighter boost mode.

Equipped with Cobalt Blue Filter
For fluorescein examination.

Ra:90 High Color-rendering LED
Ra: More than 90, R9: More than 80
Color temperature: 2700K
No need of light bulb replacement. Maintenance-free
LED lifetime: 50,000 hours

Polarizing Filter



It is theoretically and experimentally confirmed that the corneal reflex in the fundus observation is minimized by inserting two polarizing filters with the polarization axes mutually perpendicular into the illumination system and observation system. However, the entire fundus image gets dark, and this is regarded as the drawback of this method. To solve this point, Neitz made the polarizing filter in the observation system rotatable to achieve the best balance between the corneal reflex and the brightness of the fundus image by changing the angle at which two polarization axes cross each other.

Auxiliary Lens



The Auxiliary Lens corrects the diopter from -36D to +35D in increments of 1D. The lens disc rotates endlessly and a large amount of change of the diopter is smooth.

Direct-reading Diopter Indicator



Even when using the Auxiliary Lens for observation of high myopia or high hyperopia, the diopters on the correction lens can be read directly. The Diopter Indicator is illuminated and clearly readable in a dark room.

Illumination Dial



To select the small aperture for observation of macula, slit to recognize the roughness on the surface of the fundus, and the concentric scale. To use the cobalt blue filter for fluorescein examination to observe damage on the cornea, set the filter by turning the dial.

Filters



By moving the Filter Lever, insert the polarizing filter and the red-free filter that makes red tissue such as blood vessels appear black into the illumination system. Both filters can be used with all functions selected via the Illumination Dial.

Aperture Shutter



When ending to use the ophthalmoscope, shut the Aperture Shutter to prevent foreign materials from entering the optical system.

Various Functions

