Product Specifications LED Ophthalmoscopes $BX\alpha RCLED \& BX\alpha RCUSBLED$				
Product Name	LED Ophthalmoscope BXαRCLED	LED Ophthalmoscope BXαRCUSBLED		
Generic Name	Direct Ophthalmoscope			
Illumination Source	LED Bulb L-101			
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			
Battery	1 pc. Lithium-ion battery ( rated voltage 3.6V, 3200mAh )			
Maximum Power Consumption	Below 2W ( with the head attached )			
Dimensions and Weight	45(W)×223(H)×34(D) Approx.230g ( including the rechargeable battery )	45(W)×223(H)×34(D) Approx.235g ( including the rechargeable battery )		

Product Specifications Charg	ing Stand RC-III
Product Name	Charging Stand RC-III
Input Power Supply	AC 100V -240V / 50Hz -60Hz, 0.3A
AC Adapter Output	USB Type A connector DC 5V / 2A ( maximum )
USB Cable	Type A to C, 1.5m ( with overheat and over current protection )
Power Consumption	Below 30VA ( while charging )
Dimensions and Weight	60(W)×60(H)×60(D) Approx. 175g ( excluding the AC adapter )

#### **Included Accessories**

BXαRCLED	BXαRCUSBLED	RC-III
Carring case	Carring case, AC adapter, USB cable	AC adapter, USB cable

Product Specifications Transilluminator TI		
Product Name	Transilluminator TI ( Head only )	
Generic Name	General-purpose light source	
Illumination Source	LED Bulb L-104	
Maximum Power Consumption	Below 2W	
Dimensions	Head only: Approx. Φ22.5 mm × 80 mm	
Weight	Head only: Approx. 35g (including the LED bulb)	

Related Products LED Ophthalmo-Retinoscope Sets  $BX\alpha RCRXLED$   $BX\alpha RCRXSPLED$  $BX\alpha RCUSBRXLED$   $BX\alpha RCUSBRXSPLED$ 

Useful Ophthalmologic Diagnostic Set that Ophthalmoscope BXqLED and Retinoscope RXLED share one of the Battery Handles.







Neitz Instruments Co., Ltd. 4F Ichibancho Court, 15-21, Ichibancho, Chiyoda-ku, Tokyo 102-0082, Japan Phone: +81-3-3237-0552 Fax: +81-3-3237-0554 URL: https://www.neitz.co.jp/en/

Distributor











# $\begin{array}{c} & BX\alpha RCLED \\ BX\alpha RCUSBLED \end{array}$

Charging Stand RC-III

Transilluminator T

<sup>\*</sup> As part of our policy of continued product improvement, we reserve the right to alter and/or amend specifications at any time without prior notice. \* The colors in the catalog may be slightly different from those of the actual products .

# The Features of LED Direct Ophthalmoscope $BX\alpha LED$



# Brighter Illumination Field

Two to three times brighter than our halogen bulb models.



# 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 Mode for More Brightness

Switchable between Normal mode and much brighter Boost mode.



# Equipped with Cobalt Blue Filter

For fluorescein examination.



# 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.



# Powered by Li-ion Battery

Store the Device in the Table-top Charging Stand while charging.



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NEITZ

BX & LED

# **Basic Functions**



# 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.



## **Correction 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.



### Aperture Shutter

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



# **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 Illumination 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.

# Various Functions



### Observation Polarizing Filter Disc

The polarizing filter is inserted in the observation system by rotating this disc. Use when the reflected light from the cornea is glaring and hinders your observation.

#### Rubber Stabilizer

## Viewing Window

#### **Rekoss Disc**

Diopter correction lens to focus on the fundus image. Correct hyperopia with convex lens and myopia with concave lens.

## Diopter Indicator

Indication: - 12D to +11D

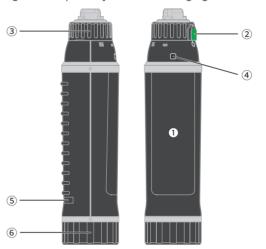
- + Diopters: +12D to +35D
- Diopters: 13D to -36D

#### **Auxiliary Lens Selector**

Insert the auxiliary lens by using this selector lever.

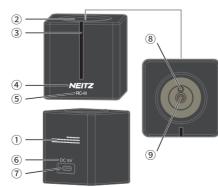
## LED Rechargeable Battery Handle

Charged via separately available Charging Stand RC-III.



- 1) LED Rechargeable Battery Handle (LH-1200)
- 2 Switch Button
- ③ Switch Ring
- 4 Pilot Lamp
- $\ensuremath{\mathfrak{D}}$  Serial Number and Information Mark
- $\ensuremath{\mathfrak{G}}$  Bottom Cap with Built-in Battery Unit 1200RC
- 7 Charging Contact

# Charging Stand RC-III



- 1) Serial Number and Information Mark
- **2 Charging Port**
- **3 LED Indicator**
- 4 Manufacturer's Logo
- 5 Model Logo
- 6 Rated Voltage Indication
- 7 USB Socket (USB Type-C)
- **8 Negative Contact**
- 9 Positive Contact

#### **Aperture Shutter**

#### / Illumination Dial

- Cobalt blue : For fluorescein examination to observe damage on the cornea.
- O Normal aperture: For typical fundus examinations.
- Small aperture: For examination of small pupils.
  In particular, when examining through constricted pupils such as during examination of the macula.
- © Concentric scale: While observing the patient's fundus, instruct the patient to fixate on the center of the concentric scale.
- Slit: Using the slit illumination facilitates recognition of roughness on the surface of the fundus.

#### Filter Lever

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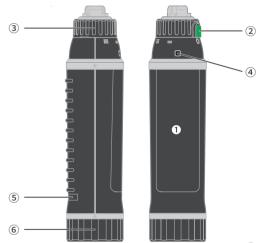
RF: Red-free filter, P: Polarizing filter

To insert the polarizing filer and red-free filter that makes red tissue such as blood vessels appear black and facilitate detection of minute fundal hemorrhages.

LED Light Source (in the ophthalmoscope head)

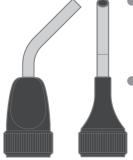
## **USB Charging Handle**

Charged via AC Adapter in the Delivery Set.



- 1) LED Rechargeable Battery Handle (LH-1300)
- 2 Switch Button
- 3 Switch Ring
- 4 Pilot Lamp
- **5 Serial Number and Information Mark**
- **© Bottom Cap with Built-in Battery Unit 1300RC**
- 7 Rated Voltage Indication
- USB Soket (USB Type-C)
- 9 Status Indicator

### Transilluminator TI



- For use of ophthalmic fixation test, eye position test, and binocular test, etc.
- Also for use in the transillumination test.
- Compatible with Neitz Dry-cell Battery Handles and Rechargeable Battery Handles.