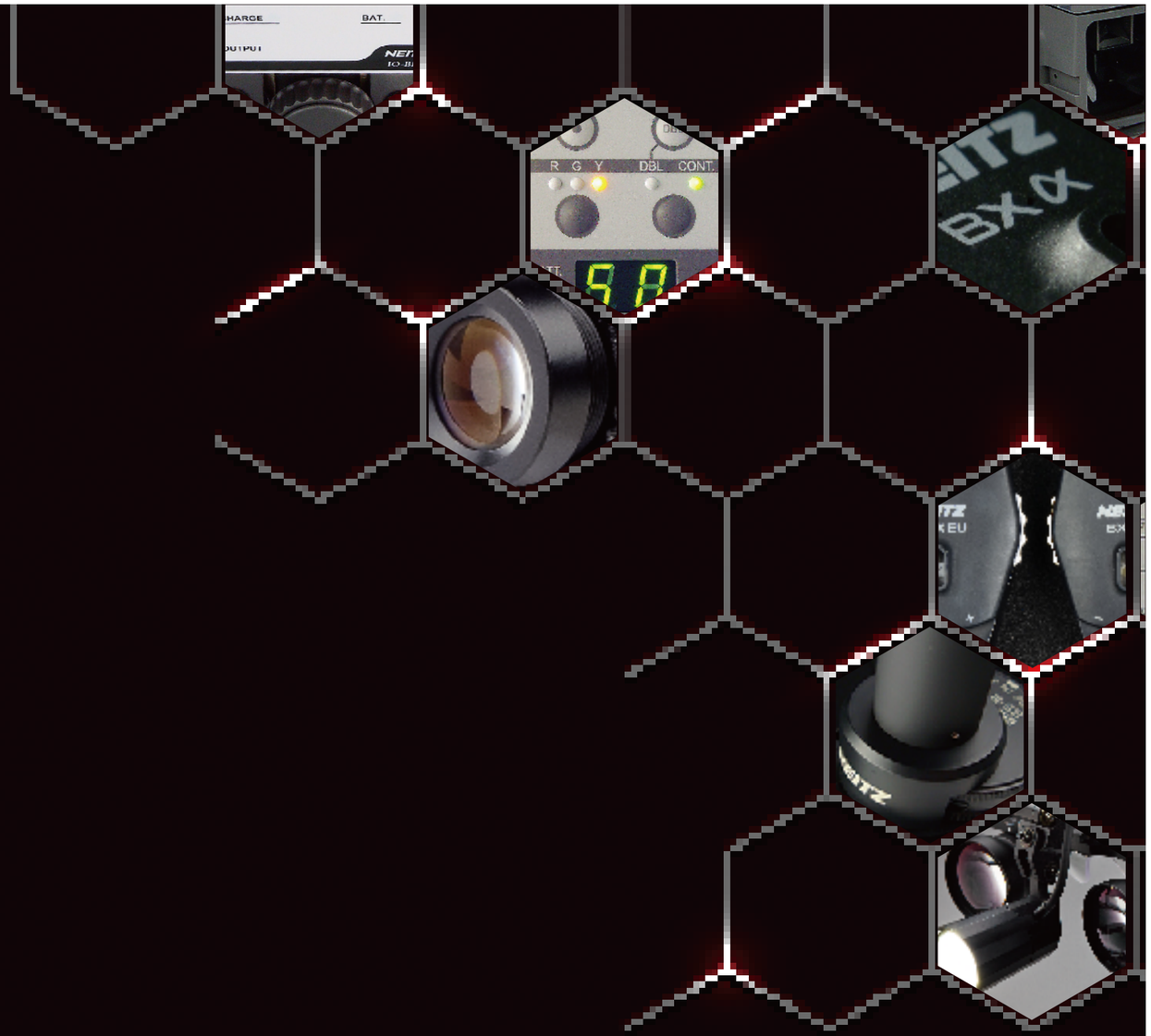

NEITZ

Made by Neitz for Your Medical Field

GENERAL CATALOG

2024-2025

NEITZ
Made by Neitz for Your Medical Field

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Visit our website

202401-200

The Pride of Neitz – Developing Products that Truly Contribute to the Medical Fields

Since its inception in 1965, Neitz has been providing the field of ophthalmology with its own value for over half a century. It has been by developing, manufacturing, and marketing of specialised products. All that time Neitz has continued to hone the skills to meet the demands of healthcare professionals. Neitz products are now widely used in more than 70 countries and areas including Japan.

Due to increasing myopia caused by multimedia equipment including mobile phones and handheld computers and eye diseases from aging, the need for ophthalmic care is rising in the recent years.

Based on the needs of the medical fields for prevention, treatment, and health promotion, we at Neitz will pursue the technologies we've been cultivated further to drive development of more advanced products forward.

The Founder of Neitz had put his thought to provide valuable products and technologies, and to contribute to society through his business activities into the company logo. Always listening to the voices of the medical professionals and putting ourselves into the position of the patients and users, Neitz is aiming to be a "Global Medical Device Manufacturer" that will provide products and technologies really needed to contribute to the health of people around the world.

Takae Nishizawa
President

Products

Digital Solution with
Neitz High Sensitive Full HD Camera

For Data Storage

Store and leave

Sharing information in a distant area and remote work site

Useful also in a distant area and remote work site

Live streaming by sharing the screen using a common web conferencing system

LIVE

Sharing in real time

To provide the patient with an explanation

Explain

For academic presentation

Communicate

For education and training

Human resource development

NEITZ
Made by Neitz for Your Medical Field

BS CAMERA-2

IO-α LED CAMERA

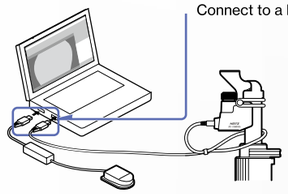
SC-1

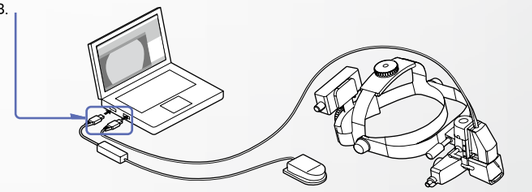
Indirect Ophthalmoscopes with Camera

	BS CAMERA-2	IO-α LED CAMERA
Light Source	LED (Warm White)	LED (Warm White)
Apertures	● ↔ ○	● ● ●
Diametre of the Illumination Field*	Continuously variable from Φ6mm to Φ60mm	Switchable in three steps Φ19mm, Φ39mm and Φ60mm
Filters	● ● ● UV	● ● UV
power source	Rechargeable battery handle that uses the special desktop charger	Rechargeable battery pack with lithium-ion batteries (3.7V)
Continuous Illumination Time	Approx.15 hours	Approx.10 hours
	Full HD 1080 High Resolution Camera SC-1 Series	
Effective Pixels	2.13 mega pixels 1945(H)×1097(V) Pixels CMOS Colour Imaging Sensor IMX291 (Sony) 1/2.8 inch 6.46mm diagonal	
Transfer Method	Progressive	
Shutter System	Rolling Shutter	
Output Image Format	MJPEG	
Data Transfer System	USB2.0 (Hi Speed)	
Max. Frame Rate	VGA 640×480 Pixels : 30fps HD 1280×720 Pixels : 30fps FHD 1920×1080 Pixels : 30fps	
Sensitivity (F5.6)	1300 mV CMOS sensor characteristics typical value	
Driver	Not needed. USB Video Class (UVC) Windows10	
Interface	USB Mini-B	
Main IPS Functions	Adjustment: Exposure (Auto & Manual), Colour Temperature (Auto & Manual), Gain, Saturation, Sharpness, Gamma Correction	
Power Supply Voltage	5.0V (USB bus power)	
Max Power Consumption	Approx. 200mA	
Dimensions / Weight	20×20×23.4 mm (without protrusion) / Approx. 12g	

*Measured at 500mm distance

Neitz Capture Software





Indirect Ophthalmoscopes with Camera

BS CAMERA-2
IO-α LED CAMERA

Monocular Indirect Ophthalmoscope with Camera

BS CAMERA-2

● Reduced corneal reflection in images

Scan the QR code above to watch the video recorded with BS CAMERA-2 and IO-a LED CAMERA

Binocular Indirect Ophthalmoscope with Camera

IO-α LED CAMERA

Capable of live streaming to record fundus image accurately and precisely with sound*1

● **Highly sensitive camera system with 2.5 times*2 higher sensitivity**
Full high definition and more sensitive camera system with the latest CMOS image sensor which enables to capture the observed images surely even in a darkish consultation room or treatment room.

● **The ultimate sensitivity to record an eye with a small diameter. Suitable for observation fundus of pediatric retinal diseases such as a retinopathy of prematurity.**

● **The NEITZ Original Capture Software**
Newly designed simple and convenient software. Intuitively operable.

● **Displays and saves the fundus image the user sees.**
The camera system provides and records movies and still images.

● **Suitable for training and education, and to obtain informed consent in the clinical settings.**

* 1 A PC with a built-in microphone and a web conferencing system is needed.
* 2 Compared to our previous products.

□PC is not included.

HD Camera
for Binocular Loupes

SC-1

Full HD 1080 High Resolution Camera SC-1 Series

SC-1

- Clear and high-definition image with the latest CMOS imaging sensor
- Natural colours and textures while reducing image degradation
- The system can be matched with the colour temperatures of the illumination with one touch action

Effective Pixcels	2.13 mega pixels 1945(H)×1097(V) Pixels CMOS Colour Imaging Sensor IMX291(Sony) 1/2.8 inch 6.46 mm diagonal
Transfer Method	Progressive
Shutter System	Rolling Shutter
Output Image Format	MJPEG
Data Transfer System	USB2.0 (Hi Speed)
Lens Unit	F8, F12, F16, F25 (one of the four lenses can be selected)
Max. Frame Rate	VGA 640×480 Pixels : 30fps HD 1280×720 Pixels : 30fps FHD 1920×1080 Pixels : 30fps
Sensitivity (F5.6)	1300mV CMOS sensor characteristics typical value
Driver	Not needed. USB Video Class (UVC) Windows10
Interface	USB Mini-B
Main IPS Functions	Adjustment: Exposure (Auto & Manual), Colour Temperature (Auto & Manual), Gain, Saturation, Sharpness, Gamma Correction
Power Supply	Power Supply Voltage 5.0V (USB bus power)
Max Power Consumption	Approx. 200 mA
Demensions	20×20×23.4 mm (without protrusion)
Weight	Approx. 12 g

The HD Camera that Proposes a Solution to Your Problem

Recording and editing images of surgical operation in high quality.

Live-streaming images of surgical operation in high quality.

Avoiding image distortion caused by an electric scalpel.

Avoiding image degradation caused by light source flickering.

High Quality Images
The Neitz HD Camera has high sensitivity and full high definition.
The specially designed software allows to play the recorded image easily.
The image can be used to prepare materials for in-house conferences and academic meetings.

Natural Colours and Textures
Provides clear and high-definition images while reducing image degradation.
The system can track and record the details of the surgical field with precision, which allows the user to use at ease in a medical setting where high level of reproducibility is required.

Use in Combination with a Shadowless Lamp and Neitz LED Illuminators
The system can be matched with the colour temperatures of the illumination with one touch action.
High quality image recording by enhancing the colour reproducibility.

Recording area of lens units

f16 lens is included in the standard accessories.

Lens unit / Shooting distance*	f8 lens	f12 lens	f16 lens	f25 lens
				
250 mm	90 x 160 mm	55 x 100 mm	40 x 70 mm	25 x 45 mm
350 mm	125 x 220 mm	70 x 125 mm	60 x 105 mm	40 x 70 mm
400 mm	145 x 260 mm	90 x 160 mm	70 x 125 mm	45 x 75 mm
550 mm	205 x 365 mm	130 x 230 mm	100 x 180 mm	60 x 105 mm
Recommended loupe (Magnificaton)	BLS-1 (1.5 to 2.0x)	BLD-3 (2.5 to 3.0x)	BLS-2 (2.0 to 2.5x) BLS-3 (2.5 to 3.0x) BLP-4 (4.0 to 4.5x)	BLP-6 (5.5 to 6.0x)

*From front of SC-1

Vision Testing Instrument

CAT-CP2

Contrast Sensitivity Acuity Tester

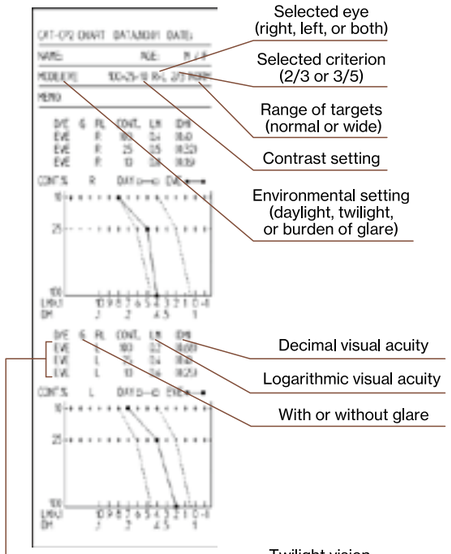
CAT-CP2

AC LED

- In addition to daytime vision, twilight vision and glare tests are available.
- Three levels of contrast values: 100%, 25%, and 10%.
- The target is Landolt ring
- Indicator ranges can be selected by switching between NORM and WIDE
- The average brightness is constant
- Secular change of the target is less
- Measurements are with audio guide
- Measurement results can be printed out

Contents	CAT-CP2, Power cable, Dust cover, Printing paper, Spare fuse 5.0A, Chin rest paper, CAT-CP PC LOADER, USB cable
Measurement Method	Automatic measurement
Target Type	Landolt ring
Target Size	Log VA: 1.3 logMAR ~ 0.1 logMAR 0.1 Steps and a total of 16 sizes of 0.155 logMAR
Measurement Distance	Far use
Contrast Levels	Three levels: 100%, 25%, and 10%
Light Source for the Target and Glare Light	White LED
Target Brightness (Target Brightness + Background Brightness)	200cd/m2 in daytime 10cd/m2 in mesopia
Glare Light	200 Lx
Dimensions	240 mm×340 mm×420 mm
Weight	Approx. 14 kg
Power Source	AC100V~240V 50/60Hz 150VA
Printer Unit	Thermal graphic printer

Measurement Results from CAT-CP2



- ☐ The patient can undergo the inspection of the contrast sensitivity with the same feeling as the conventional visual acuity test.
- ☐ Landolt broken rings are used as targets. Easy to understand for the patient.
- ☐ Fits well in a niche space.
- ☐ Compact space-saving design. Top board size 450mm x 450mm. Fits your optical bench.

Doctor's Voice

Doctor's Voice by Dr. Hiroshi Uozumi (Kitasato University, Japan)

Recently, devices with various measures to evaluate the visual performance for contrast variation have been commercialised by a lot of companies.
The compact version CAT-CP2 utilizes the principles of its predecessor CAT-2000 and inherits its selected functions.

Studies on the application of the CAT-2000 to cataract have been made [1), 2)]. We have confirmed its clinical efficacy at the Department of Ophthalmology of the Kitasato University [3)].

The characteristics of CAT-CP2 are the use of the Landolt broken rings as targets and the unique mechanism to keep the average illuminance of the target constant at each contrast.

The Landolt broken ring consists of square wave and is well-known. The patient can undergo the inspection with the same feeling as the conventional visual acuity test. This is easy to understand for the patient and makes the inspection easier [2)].
The targets are placed in the order of logarithm. It is easy to compare the visual acuity before and after the operation, and for statistical processing [3)].

Furthermore, the device allows to inspect with a contrast of 25% that significant difference can be observed before and after a cataract operation. It has functions to evaluate the patient visibility in various environments, not only daylight vision, also twilight vision and burden of glare.

When choosing your device, what the important is to understand its characteristics. By evaluating the visual performance of contrast variation in the clinical settings, we expect this device will contribute to further improvement of the quality of vision of patients.

[Reference]
1) Visual Acuity and Contrast Visual Acuity Predicted from Cataract Type
Shino Enta et al., The Journal of the Japanese Society of Cataract Research Vol 27, 68-73, 2015
2) Evaluation of a new contrast sensitivity measurement device, CAT-2000
Toshiya Lee et al., The 54th Annual Congress of the Japan Clinical Ophthalmology. Original: Japanese Journal of Clinical Ophthalmology Vol. 55 (6), 1147-1150, 2001
3) Low contrast visual acuity in CAT2000
Kaori Nogami et al., Japanese Orthoptic Journal,Vol. 32, 115-119, 2003

How to inspect with the CAT-CP2

1. Have the patient place her/his chin on the chin rest.
2. Align the height of the chin rest with the eye line.
3. Have the patient adjust the vertical direction of the chin rest so that she or he can see the shown Landolt ring in the centre.
4. Press the start button. The measurement will start automatically.
5. Instruct the patient to tilt the answer lever to the direction of the Landolt ring's gap.
6. Inform the patient to press the "unseeable" button if she or he cannot see the Landolt ring's gap.

* The inspection should be performed in a semi-dark room.

Fundus Examination Instruments

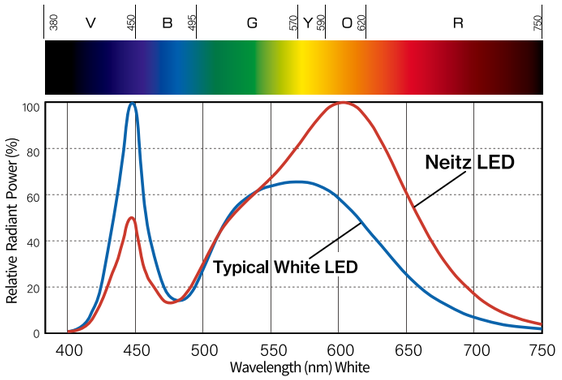
[Monocular Indirect Ophthalmoscopes]

BS-III LED
RC-Li II
BS-II LED
LPS-250A (with Hanger G)
BS-Jr.-Super LED

Excellent Operability and Brightness in Response to the Demands of Ophthalmologists

Sharp and Clear Illumination for Fundus Observation

LED Technology for Pursuing Patient Comfort



The light hazard of all Neitz LED ophthalmoscopes conforms to the requirements of the ISO 15004-2. Compared to general white LEDs, the LEDs in the Neitz products have the following characteristics:
- the short wavelength has a low relative energy that may cause retinal photodamage and photophobia,
- high relative energy of the long wavelength from yellow to red.
The main colours visible on fundus examinations are red in the blood vessels, orange in the retina, and yellow in the optic nerve papillae. The colour temperature of the LEDs in the Neitz products is 3200K and equivalent to that of a halogen bulb, enabling fundus observation almost same as using a halogen bulb.

Monocular Indirect Ophthalmoscopes



	BS-III LED	BS-II LED	BS-Jr.-Super LED
Light Source	LED (Warm White)	LED (Warm White)	LED (Warm White)
Apertures	● ↔ ○	● ↔ ○	● ○ ○
Diametre of the Illumination Field*	Continuously variable from Φ6mm to Φ60 mm	Continuously variable from Φ6mm to Φ60 mm	Switchable in three steps Φ19mm,Φ50mm and Φ80mm
Filters	● ● ● UV D	● ● ● UV D	UV RF 1/2 ND 1/4 ND
Power Source	Rechargeable battery handle that uses the special desktop charger	Transformer AC 100-240V 50/60Hz 6VA	Rechargeable battery
Battery	Lithium-ion battery	-	Ni-MH battery
Continuous Illumination Time	Approx. 15 hours	-	Approx. 4 to 5 hours
Sterilization	-	Low-temperature EOG (40 °C)	Low-temperature EOG (40 °C)
Options	Side mirrors Presbyopia lenses Yellow filter Binocular attachments BS-CAMERA-2	Side mirrors Presbyopia lenses Yellow filter Binocular attachments	-
Catalogue page	13	14	14

*Measured at 500 mm distance

Rechargeable Monocular Indirect Ophthalmoscope

BS-III LED

- Rechargeable and cordless
- Sharp and clear spot illumination
- Switchable five filters
- The LED lifetime is longer than 50,000 hours
- The colour temperature of the LED is 3200 K, equivalent to the halogen bulb of the former model

Contents	BS-III LED
Light Source	LED
Power Consumption	DC3.5V 0.5W
Filters	UV, Red, Red-free, Cobalt Blue, Diffuser
Diameter of the Illumination Field	Continuously variable from 6 mm to 60 mm (at the 500 mm from the front end of the illumination)
Continuous Illumination Time	Approx. 15 hours (at the maximum light intensity)
Dimensions	Dia. 52 mm x 300 mm (H)
Weight	Approx. 310 g

Lithium Ion Battery Charger

RC-Li II

Contents	RC-Li II charger, AC adaptor, power cable

Charger

Charging time	Approx. 3 hours
Dimensions	100 mm x 112 mm x 80 mm
Weight	Approx. 480 g

AC Adaptor

Power supply	AC 100-240V, 50Hz/60Hz (when charging)
Output	DC 5V 2.6A
Dimensions	48 mm x 75 mm x 27 mm (without cable)
Weight	Approx. 140 g

Monocular Indirect Ophthalmoscope

BS-II LED

- The weight is as light as 220g
- Sterilizable with low-temperature EOG
- The LED reduced the power consumtion to one fifth in comparison with the former model
- The colour temperature of the LED is 3200 K, equivalent to the halogen bulb of the former model

Contents	BS-II LED, Cord G
Light Source	3W LED 3200K
Illumination Voltage	DC3.2V 0.7W
Filters	UV, Red, Red-free, Cobalt Blue, Diffuser
Diameter of the Illumination Field	Continuously variable from 6 mm to 60 mm (at the 500 mm from the front end of the illumination)
Dimensions	Dia. 52 mm x 251 mm (H)
Weight	Approx. 220 g
Sterilization	EOG（40°C）

Transformer Power Supply for BS-II LED

LPS-250A

- The transformer for BS-II LED and IO-α LED
- For table-top and wall-mounted use
- The hanger switch to turn on and off the illumination is available for wall-mounted use
- Delivered with the hanger and brackets for wall-mounted use

Contents	LPS-250A, Hanger G for BS-II LED, wall mount bracket, cable adapter, USB cable
Power Source	AC100V-240V 50/60Hz 0.3A
Output	DC 5V
Dimensions	160 mm x 100 mm x 99 mm
Weight	Approx. 450 g

Hanger G

LPS-250 and the stand
(Optional)

Small-sized Monocular Indirect Ophthalmoscope

BS-Jr.-Super LED

- Sterilizable with EOG. Usable in an operating room
- Delivered with rechargeable Ni-MH batteries
- The diameter of the illumination field is switchable in three steps
- The LED with the colour of incandescent allows comfortable observation
- Clear illumination without filament shadow
- ND4 filter to reduce the glare of the examinee

Contents	BS-Jr.-Super LED AA Ni-MH rechargeable batteries (2 pcs)
Light Source	3W LED
Illumination Voltage	DC1.2V 0.6W
Battery	Rechargeable AA Ni-MH battery x 1 pc
Filters	UV, Red-free, ND2, ND4
Diameter of the Illumination Field	Switchable in three steps: 19 mm, 50 mm, and 80 mm (at 500 mm distance from the prism)
Dimensions	Dia. 36 mm x 204 mm (H)
Weight	Approx. 220 g
Continuous Illumination Time	4 to 5 hours
Sterilization	EOG sterilizable at 40°C or as close as possible to 40°C. (The internal batteries must be removed before sterilization.)

Options

BS-III LED / BS-II LED

NEITZ Aspherical Lens 20D

Clear and wide field of view. Glass lens with no aberration.
Field of view: 60°, Magnification: 3.1x

Binocular Attachment BS-III-BA

For stereoscopic vision with a small pupil (2 mm)

Side View Mirror

Two types are available. The right type to view from the right side, and the left type to view from the left side.

Presbyopia Lenses, Yellow Filter, Lens Holder

The lens holder accepts two presbyopia lenses or combination of presbyopia lens and yellow filter. The presbyopia lens is available in +1D, +2D, and +3D.

Fundus Examination Instruments

[Binocular Indirect Ophthalmoscopes]

IO-α LED
IO-BP3A
LPS-250A

Unique Optical System for Effective Field of View and Three-dimensional Image

Sharp and Clear Illumination for Fundus Observation

Free from the Bulb Replacement

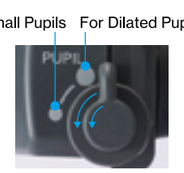
Maximising Continuous Illumination Time

Binocular Indirect Ophthalmoscopes

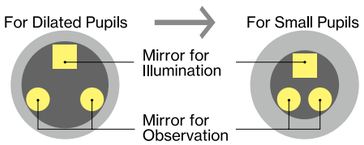
	IO-α LED	IO-α LED
	Battery-powered type	Transformer type
Light Source	LED (Warm White)	LED (Warm White)
Apertures		
Diameter of the Illumination Field*	Φ19mm, Φ50mm, Φ80mm (Switchable in three steps)	Φ19mm, Φ50mm, Φ80mm (Switchable in three steps)
Filters		
Minimum Pupil Diameter	2mm	2mm
Power Source	Rechargeable lithium-ion battery (3.7V)	Transformer AC 100-240V 50/60Hz 6VA
Continuous Illumination Time	Approx.10 hours	-
Options	IO Stand, Aspherical Lens 20D	IO Stand, Aspherical Lens 20D
Catalogue Page	19-20	19-20

*Measured at 500 mm distance

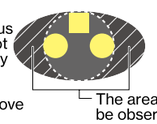
Each lever for the illumination angle adjustment and observation adjustment is respectively possible with a single hand.



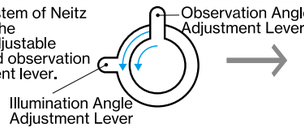
For Small Pupils
Even in observation for small pupils, fully illuminated and clear stereoscopic fundus image can be easily obtained.



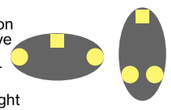
For Oval Pupil
The periphery of fundus indicated below cannot be observed effectively by the optical system which illumination and observation mirrors move simultaneously



The optical system of Neitz IO-α LED has the respectively adjustable illumination and observation angle adjustment lever.



With IO-α LED, fundus observation with large effective field of views is possible, even for oval pupils as the pictures on the right



Binocular Indirect Ophthalmoscope

IO-α LED

- An LED with the colour of incandescent is used
- Clear illumination without filament shadow
- Stereoscopic observation even for small pupils by moving the knobs of the illumination and observation systems separately
- Large effective visual field for observation of flat pupils
- 5 hours of continuous illumination with the energy-efficient LED

Contents (Set 4)	IO-α LED, battery pack, AC adapter, extension cable, belt hook,wiring ring, teaching mirror, detachment chart, carrying case
Light Source	3W LED
Voltage during Illuminating	DC3.2V 0.7W
Filters	UV, Red-free, Cobalt Blue
Maximum Light Intensity	Approx. 600 lx (using UV filter, at 500 mm distance)
Minimum Pupil Diameter	2 mm
Diameter of the Illumination Field	Switchable in three steps: 19mm, 50 mm, and 80 mm (at 500 mm distance from the illuminating mirror)
Dimensions	164 mm x 111.5 mm x 58 mm (excluding headband)
Weight	Approx. 480 g

NEITZ Aspherical Lens 20D
Clear and wide field of view. Glass lens with no aberration.
Field of view: 60°, Magnification: 3.08x

Contents

Transformer type

Item	SET2	SET3	SET4
IO-α LED Main Unit	1	1	1
Power Supply Unit LPS-250	1	1	1
AC Adaptor Set	1	1	1
USB Cable (Type-C)	1	1	1
Curled Code (2.2m)	1	1	1
Wall Mount Hook Wood Screw: x 3 Thumbscrew: x 1	1	1	1
Hanger	1	1	1
Wiring Ring	1	1	1
Teaching Mirror	-	-	1
Detachment Chart	-	-	1
Carrying Case	-	1	1

Battery-powered type

Item	SET2	SET3	SET4
IO-α LED Main Unit	1	1	1
IO-BP3A	1	1	1
AC Adapter set	1	1	1
USB Cable (Type-C)	1	1	1
Extension Cord (1 m)	1	1	1
Belt Hook	1	1	1
Wiring Ring	1	1	1
Teaching Mirror	-	-	1
Detachment Chart	-	-	1
Carrying Case	-	1	1

Contents (Set 4)

① Battery pack IO-BP3A
② AC adapter
③ Extension cable
④ USB cable (type-C)
⑤ Teaching mirror
⑥ Wiring ring
⑦ Belt hook
⑧ Detachment chart
⑨ Carrying case

Options

IO Stand

IO-α LED on IO Stand

Battery Pack

IO-BP3A

- The battery pack enables free movement
- Easy to charge by simply plugging in the USB connector to the AC adapter *1
- With 4 interchangeable power plugs as standard accessories

*1: It cannot be used while charging

Contents	Battery Pack
Battery	Rechargeable lithium-ion batteries (3.7V)
Charging Time	Approx. 2 hours
Continuous Illumination Time	Approx. 5 hours (at maximum light intensity)
Dimensions	Approx. 90 x 45 x 30 mm (without protrusion)
Weight	Approx. 90 g

AC adapter and extension curled cord for connection are sold separately.

Transformer

LPS-250A (with Hanger C)

- The transformer for IO-α LED
- For table-top and wall-mounted use
- The hanger switch to turn on and off the illumination is available for wall-mounted use
- Delivered with the hanger and brackets for wall-mounted use

Contents	LPS-250A, Hanger C for IO-α LED. wall mount bracket,cable adapter, USB cable
Power Source	AC100V-240V 50/60Hz 0.3A
Output	DC 5V
Dimensions	160 mm x 100 mm x 99 mm
Weight	Approx. 450 g

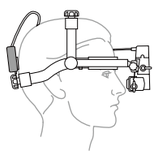
Extension curled cord for connection is sold separately.

Hanger C

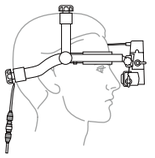
How to put on the IO-BP3A

Attach the IO-BP3A either to the back of head or to your belt or pocket using the belt hook.

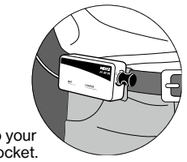
<On the back of head>



<If not attaching to the headband>



Attach to your belt or pocket.



LED Direct Ophthalmoscope

BXα13LED
BXα13ALED

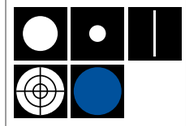
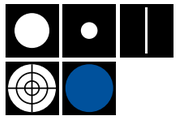
LED with long lifespan over 50,000 hours

Boost mode for more brightness

For Accurate Diagnosis of Myopia

Striving for Optimal Balance to Avoid Corneal Reflections

Specially Designed Viewfinder to Secure Clear Field of View

	BXα13LED	BXα13ALED
Light Source	LED	LED
Apertures		
Filteres	Polarizing filter Red-free filter	Polarizing filter Red-free filter
Correction lens	-36D to +35D	-36D to +35D
Dust shutter	○	○
Handle	Dry-cell battery handle	Dry-cell battery handle
Battery/Continuous Illumination Time	C-size alkaline battery	AA-size alkaline battery
Catalogue page	22	22

Carring Case

LED Ophthalmoscope

BXα13LED

- The correction lens from -36D to+35D at the interval of 1D to focus accurately
- Unique polarizing filter for observation of natural fundus images
- Neitz original optical systems for minimal corneal reflex
- Dust shutter to prevent foreign matter
- Long time use with two C-size batteries

Contents	BXαLED head, C-size battery LED handle, C-size alkaline batteries (2 pcs.), carrying case
Filters	Polarizing filter, red-free filter
IlluminationDial	Normal aperture,small aperture,slit, concentric scale, cobalt blue filter
Dimensions	45(W)x223(H)x34(D) mm
Weight	290 g (including the batteries)

LED Ophthalmoscope

BXα13ALED

- The correction lens from -36D to+35D at the interval of 1D to focus accurately
- Unique polarizing filter for observation of natural fundus images
- Neitz original optical systems for minimal corneal reflex
- Dust shutter to prevent foreign matter
- Slim handle with two AA-size batteries

Contents	BXαLED head, AA-size battery, LED handle, AA-size alkaline batteries (2 pcs.), carrying case
Filters	Polarizing filter, red-free filter
IlluminationDial	Normal aperture,small aperture,slit, concentric scale, cobalt blue filter
Dimensions	45(W)x223(H)x31(D) mm
Weight	195 g (including the batteries)

Fundus Examination Instruments

[Direct Ophthalmoscopes]

BXα-13
BXα-13A
BXα-RC
BXα-12345FO
BXα-134FO

For Accurate Diagnosis of Myopia

Striving for Optimal Balance to Avoid Corneal Reflections

Specially Designed Viewfinder to Secure Clear Field of View

Direct Ophthalmoscopes

	BXα-13	BXα-13A	BXα-RC
Light Source	Halogen bulb	Halogen bulb	Halogen bulb
Apertures	● ● | RF	● ● | RF	● ● | RF
Filters	Polarizing filter Correction filter 4000 K	Polarizing filter Correction filter 4000 K	Polarizing filter Correction filter 4000 K
Correction lens	-36D to +35D	-36D to +35D	-36D to +35D
Dust shutter	○	○	○
Handle	Dry-cell battery handle	Dry-cell battery handle	Rechargeable battery handle that uses the special desktop charger
Battery/Continuous Illumination Time	C-size alkaline battery	AA-size alkaline battery	Nickel-cadmium rechargeable battery/Approx. 80min.
Catalogue page	25	25	25

Ophthalmoscope

BXα-13

- The correction lens from -36D to+35D at the interval of 1D to focus accurately
- Unique polarizing filter for observation of natural fundus images
- Neitz original optical systems for minimal corneal reflex
- Dust shutter to prevent foreign matter
- Long time use with two C-size batteries

Contents	BXα head, C-size battery handle C-size alkaline batteries (2 pcs.), spare bulb L-30, carrying case
Bulb	L-30 (3V, 2W)
Filters	Polarizing filter, correction filter 4000 K
Illumination Dial	Normal aperture, small aperture, slit, concentric scale, red-free filter
Dimensions	C-size battery handle: dia. 32 mm x 223 mm (H)
Weight	Approx. 550g

Ophthalmoscope

BXα-13A

- The correction lens from -36D to +35D at the interval of 1D to focus accurately
- Unique polarizing filter for observation of natural fundus images
- Neitz original optical systems for minimal corneal reflex
- Dust shutter to prevent foreign matter
- Slim handle with two AA-size batteries

Contents	BXα head, AA-size battery handle, AA-size alkaline batteries (2 pcs.), spare bulb L-30, carrying case
Bulb	L-30 (3V, 2W)
Filters	Polarizing filter, correction filter 4000 K
Illumination Dial	Normal aperture, small aperture, slit, concentric scale, red-free filter
Dimensions	85 mm x 245 mm x 45 mm
Weight	Approx. 450 g

Ophthalmoscope

BXα-RC

Battery Charger

RC-II

- Charger for the rechargeable battery 1000RS
- Charges 2 pcs. of Neitz RC battery handles at the same time
- The desk charger holds the ophthalmoscopes /retinoscopes while charging

Contents	BXα head, RC battery handle,Rechargeable Battery 1000RS,Spare bulb L-29, carrying case
Bulb	L-29 (4V, 2.5W)
Filters	Polarizing filter, correction filter 4000 K Illumination Dial, Normal aperture, small aperture, slit, concentric scale, red-free filter
Dimensions	85 mm x 245 mm x 45 mm
Weight	Approx. 580 g

RC-II (Option)

Power Source	AC100V~240V 50/60Hz 2VA
Dimensions	180 mm x 78 mm x 98 mm
Weight	Approx. 460 g

Otoscopes and Diagnostic Instrument Sets

	BXα-12345FO	α-34FO	BXα-134FO	FO
Light Source	Halogen bulb Halogen fibre	Halogen fibre	Halogen bulb Halogen fibre	Halogen fibre
Magnification（Otoscope）	3x	3x	3x	3x
Apertures	● ● | RF	-	● ● | RF	-
Filters	Polarizing filter Correction filter 4000 K	-	Polarizing filter Correction filter 4000 K	-
Correction lens（Ophthalmoscope）	-36D to +35D	-	-36D to +35D	-
Ear tips	Φ2.5mm×10 Φ4.0mm×10	Φ2.5mm×10 Φ4.0mm×10	Φ2.5mm×10 Φ4.0mm×10	Φ2.5mm×10 Φ4.0mm×10
Handle	Dry-cell battery handle	Dry-cell battery handle	Dry-cell battery handle	Dry-cell battery handle
Battery	C-size alkaline battery	C-size alkaline battery	C-size alkaline battery	AA-size alkaline battery
Additional item	Laryngoscope	-	-	-
Catalogue page	28	28	28	28

Diagnostic Set (with Fibre Otoscope)

BXα-12345FO

- Diagnostic instrument set including a laryngoscope, suitable for a home visit
- The otoscope with a rotating lens with 3x magnification
- The fibreoptic light source without colour unevenness
- Disposable ear tips for safety and hygiene

Contents	BXα head, C-size battery handle, C-cell alkaline batteries x 2pcs, otoscope head, ear tips Ø 2.5 mm (10pcs.), Ø4.0 mm (10pcs.), laryngoscope head,spare bulbs L-30, L-69, L-06, carrying case
Bulbs	Ophthalmoscope: L-30 (3V, 2W) Otoscope: L-69 (3V, 2W) Laryngoscope: L-06 (3V, 0.9W)
Filters	Polarizing filter, correction filter 4000 K, red-free filter, concentric scaler
Illumination Dial	Normal aperture, small aperture, slit, concentric scale, red-free filter
Dimensions	BXα Head: 89 mm Otoscope Head: 82 mm, Laryngoscope(Extendable): 135 to 160 mm, C-size Battery Handle: 134 mm
Approx. Weight	BXα head: 70 g, Otoscope head: 95 g Laryngoscope (Extendable): 45 g Battery handle: 226 g

● ● | RF

Ophthalmoscope-Otoscope Set

BXα-134FO

- Diagnostic instrument set suitable for a home visit
- The otoscope with a rotating lens with 3x magnification
- The otoscope with a fibreoptic light source without colour unevenness
- Disposable ear tips for safety and hygiene

Contents	BXα head, C-size battery handle, C-cell alkaline batteries x 2pcs, Otoscope head, ear tips dia. 2.5 mm x 10pcs, ear tips dia. 4.0 mm x 10pcs, spare bulb L-30, L-69, carrying case
Bulb	Ophthalmoscope: L-30 (3V, 2W) Otoscope: L-69 (3V, 2W)
Filters Illumination Dial	Polarizing filter, correction filter 4000K Normal aperture, small aperture, slit, concentric scale, red-free filter
Dimensions	BXα head: 89 mm, Otoscope Head: 82 mm, C-size Battery handle: 134 mm
Approx. Weight	BXα head: 70 g, Otoscope Head: 95 g Battery handle: 226 g, Otoscope Head: 95 g

● ● | RF

Accessories (Option)

Ear Tips
Ear tips (S) : Φ 2.5mm ×10 Ear tips (L) : Φ 4.0mm ×10
Ear tips (S) : Φ 2.5mm ×20
Ear tips (L) : Φ 4.0mm ×20

Fibre Otoscope

α-34FO

- The otoscope with a rotating lens with 3x magnification
- In-depth and bright observation of the ear canal and nostril by the anti-reflection ear tips
- The fibreoptic light source without colour unevenness

Contents	Otoscope head, C-size battery handle, C-size alkaline batteries (2pcs.), otoscope head, ear tips Ø 2.5 mm(10pcs.), Ø 4.0 mm (10pcs.), spare bulb L-69, carrying case.
Bulb	Otoscope: L-69 (3V, 2W)
Dimensions	C-size battery handle: dia. 32 mm x 216 mm (H)
Weight	Approx. 360 g

Fibre Otoscope

FO

- The otoscope with a rotating lens with 3x magnification
- In-depth and bright observation of the ear canal and nostril by the anti-reflection ear tips
- The fibreoptic light source without colour unevenness

Contents	Otoscope head, AA-size battery handle, AA-size alkaline batteries (x 2 pcs), otoscope head, ear tips Ø 2.5 mm (10 pcs.), Ø 4.0 mm (10 pcs.), spare bulb L-69, carrying case.
Bulb	L-69 (3V, 2W)
Dimensions	210 mm x 100 mm x 40 mm (without protrusions)
Weight	Approx. 110 g

LED Retinoscopes

RX3LED
RX3ALED
RX3SPLED
RX3ASPLED
BXα13RXLED

LED with long lifespan over 50,000 hours

Boost mode for more brightness

Superior Operability with Adjustable Beam

Spot Retinoscope with Simple Operation

Thorough Pursuit of Visibility

LED Streak Retinoscopes ／ LED Spot Retinoscopes

	RX3LED	RX3ALED	RX3SPLED	RX3ASPLED
Light Source	LED	LED	LED	LED
Presbyopic lens (+2D)	○	○	-	-
Head attachment	○	○	○	○
Handle	Dry-cell battery handle	Dry-cell battery handle	Dry-cell battery handle	Dry-cell battery handle
Battery/Continuous Illumination Time	C-size alkaline battery	AA-size alkaline battery	C-size alkaline battery	AA-size alkaline battery
Catalogue page	31	31	31	31

LED Streak Retinoscope

RX3LED

- Helps the accurate diagnosis of the at the interval of 1D to focus accurately astigmatic axis
- The beam can be turned 360 degrees steplessly
- The anti-reflection filter provides a brighter and wider field of view
- Long time use with two C-size batteries

Contents	RX LED head, C-size battery handle, C-size batteries (2pcs.), head attachment, presbyopic lens (+2D), carrying case
Streak Variations	Divergent, convergent, and parallel
Light Flux Rotation	360 degrees stepless
Dimensions	34(W)x269(H)x34(D) mm
Weight	340 g (including the batteries)

LED Ophthalmoscope

RX3SPLED

- Delivers parallel light in dot shape
- Bright and wide field of view realised by adopting an anti-reflection filter
- Long time use with two C-size batteries

Contents	RXSP LED head, C-size battery handle, C-size batteries (2pcs.), head attachment, presbyopic lens (+2D),carrying case
Dimensions	34(W)x269(H)x34(D) mm
Weight	300 g (including the batteries)

LED Ophthalmoscope-Retinoscope Set

BXα13RXLED

- A convenient set of ophthalmoscope BXα and streak retinoscope RX compatible with C-size battery handle

Contents	BXαLED head, RXLED head, C-size battery handle, C-size batteries (2pcs.), head attachment, presbyopic lens (+2D), carrying case
Dimensions	BXα head: 89 mm RX head: 135 mm Battery handle: 144 mm
Weight	BXα head: 60 g RX head: 110 g Battery handle: 230 g

LED Streak Retinoscope

RX3ALED

- Helps the accurate diagnosis of the at the interval of 1D to focus accurately astigmatic axis
- The beam can be turned 360 degrees steplessly
- The anti-reflection filter provides a brighter and wider field of view
- Slimline handle with two AA batteries

Contents	RX LED head, AA-size battery handle, AA-size batteries (2pcs.), head attachment, presbyopic lens (+2D), carrying case
Streak Variations	Divergent, convergent, and parallel
Light Flux Rotation	360 degrees stepless
Dimensions	34(W)x269(H)x31(D) mm
Weight	245 g (including the batteries)

LED Ophthalmoscope

RX3ASPLED

- Delivers parallel light in dot shape
- Bright and wide field of view realised by adopting an anti-reflection filter
- Slimline handle with two AA batteries

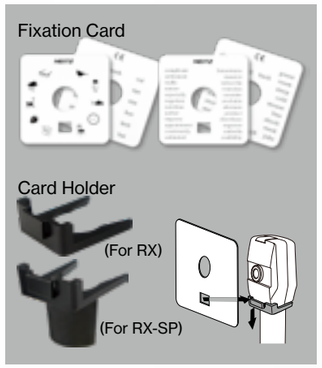
Contents	RXSP LED head, AA-size battery handle, AA-size batteries (2pcs.), head attachment, presbyopic lens (+2D), carrying case
Dimensions	34(W)x266(H)x31(D) mm
Weight	205 g (including the batteries)

Carring Case

Options

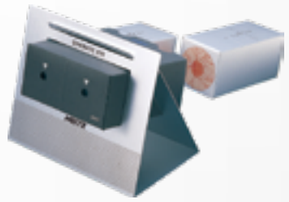
Fixation Card Set FC

- Specially designed fixation card set for Neitz retinoscope RX series.



Schematic Eye for Retinoscopy Practice

- The Schematic Eye allows to check the reflex of the “with” and “against” movements by setting one eye at a positive value and the other at a negative value.
- The Schematic Eye shows the difference between the divergent and convergent beam of light emitted from the retinoscope well.



Stand Schematic Eye for Practice

Retinoscopes

RX-3
RX-3A
RX-RC
RX-3SP
RX-3ASP
RX-RCSP
BXα-13RX
ORT-Y

High Reliability Fostered by over 50 Years of History

Accurate Astigmatism Diagnosis with Sharp Streaks of Light

Superior Operability with Adjustable Beam

Spot Retinoscope with Simple Operation

Thorough Pursuit of Visibility

Streak Retinoscopes

	RX-3	RX-3A	RX-RC
Light Source	Halogen bulb	Halogen bulb	Halogen bulb
Presbyopic lens (+2D)	○	○	○
Head attachment	○	○	○
Handle	Dry-cell battery handle	Dry-cell battery handle	Rechargeable battery handle that uses the special desktop charger
Battery/Continuous Illumination Time	C-size alkaline battery	AA-size alkaline battery	Nickel-cadmium rechargeable battery/Approx. 80min.
Also works as	-	-	-
Catalogue page	29	29	29

Spot Retinoscopes

	RX-3SP	RX-3ASP	RX-RCSP	ORT-Y
Light Source	Halogen bulb	Halogen bulb	Halogen bulb	Halogen bulb
Presbyopic lens (+2D)	-	-	-	-
Head attachment	○	○	○	-
Handle	Dry-cell battery handle	Dry-cell battery handle	Rechargeable battery handle that uses the special desktop charger	Dry-cell battery handle
Battery/Continuous Illumination Time	C-size alkaline battery	AA-size alkaline battery	Nickel-cadmium rechargeable battery/Approx. 80min.	AA-size alkaline battery
Also works as	-	-	-	Penlight
Catalogue page	29	29	29	30

Streak Retinoscope

RX-3

- The Neitz retinoscopes use bulbs with precisely processed filaments of 0.05mm diameter, which create one of the sharpest streaks of light in the industry
- Helps the accurate diagnosis of the astigmatic axis
- The beam can be turned 360 degrees steplessly
- The anti-reflection filter provides a brighter and wider field of view
- Long time use with two C-size batteries

Contents	RX head, C-size battery handle, C-size batteries (2pcs.), head attachment, presbyopic lens (+2D), spare bulb L-28, carrying case
Streak Variations	Divergent, convergent, and parallel
Light Flux Rotation	360 degrees stepless.
Bulb	L-28 (3V, 1.2W)
Dimensions	C-size battery handle: dia. 25 mm x 269 mm (H)
Weight	Approx. 350 g

Spot Retinoscope

RX-3SP

- Delivers parallel light in dot shape
- Bright and wide field of view realised by adopting an anti-reflection filter
- Long operating time with two C-cell batteries

Contents	RX-SP head, C-size battery handle, C-size batteries (2pcs.), head attachment, spare bulb L-05, carrying case
Bulb	L-05 (3V, 1.5W)
Dimensions	C-size battery handle: dia. 32 mm x 267 mm (H)
Weight	Approx. 300 g

Streak Retinoscope

RX-3A

- Precision processing of 0.05 mm diameter filaments achieves one of the finest sharp streaks of light in the industry
- Support accurate diagnosis of astigmatic axis
- Continuous 360-degree-rotation of luminous flux
- Bright and wide field of view realised by adopting an anti-reflection filter
- Slimline handle with two AA batteries

Contents	RX head, AA-size battery handle, AA-size batteries (2pcs.), head attachment, presbyopic lens (+2D), spare bulb L-28, carrying case
Streak Variations	Divergent, convergent, and parallel Light Flux Rotation 360 degrees stepless
Bulb	L-28 (3V, 1.2W)
Dimensions	C-size battery handle: dia. 25 mm x 269 mm (H)
Weight	Approx. 250 g

Spot Retinoscope

RX-3ASP

- Delivers parallel light in dot shape
- Bright and wide field of view realised by adopting an anti-reflection filter
- Slimline handle for use with two AA batteries

Contents	RX-SP head, AA-size battery handle, AA-size batteries (2pcs.), head attachment, spare bulb L-05, carrying case
Bulb	L-05 (3V, 1.5W)
Dimensions	AA-size batteryg handle: dia. 25 mm x 267 mm (H)
Weight	Approx. 200 g

Streak/Spot Retinoscope

RX-RC
RX-RCSP

Battery Charger

RC-II

- Rechargeable battery powered. No need of battery replacement
- Charger for the rechargeable battery 1000RS
- Charges 2pcs. of Neitz RC battery handles at the same time

Contents	RX head (RX-SP head), RC battery handle, head attachment, presbyopic lens (+2D), rechargeable battery 1000RS, spare bulb L-27, (spare bulb L-32) carrying case *Accessories of RX-RCSP in parentheses
Bulb	RX-RC L-27 (4V, 2.6W) RX-RCSP L-32 (3.6V, 1.6W)
Rechargeable Battery	1000 RS (1 pc.), approximately 15 hours to fully charge Continuous operating time: Approx. 80 minutes
Dimensions	RC battery handle: dia. 32mm x 269mm (H)
Weight	Approx. 380 g
RC-II	
Power Source	AC100V~240V 50/60Hz 2VA
Dimensions	180 mm x 78 mm x 98 mm
Weight	Approx. 460 g

Ophthalmoscope-Retinoscope Set

BXα-13RX

- A convenient set of ophthalmoscope BXα and streak retinoscope RX compatible with the battery handle
- AA Battery set BXα-13A-RX and Rechargeable Battery set BXα- RC-RX are available

Contents	BX head, RX head, C-size battery handle, C-size batteries (2pcs.), head attachment, presbyopic lens (+2D), spare bulbs L-30 and L-28, carrying case
Bulbs	Ophthalmoscope: L-30 (3V, 2W) Retinoscope: L-28 (3V, 1.2W)
Dimensions	BXα head: 89 mm RX head: 135 mm Battery handle: 134 mm
Weight	BXα head: Approx. 70 g RX head: Approx. 120 g Battery handle: Approx. 226 g

Carring Case

Pocket Retino Light

ORT-Y

- By putting the red cap over the bulb at the head, colour field inspection can be performed.
- Designed for binocular visual function test, visual fixation test, eye position and visual field test, and refraction test as a simple spot retinoscope
- Can be used as a penlight without the retino-head

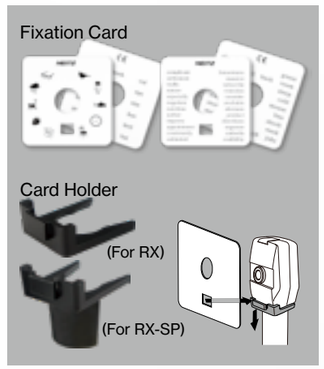
Contents	ORT-Y body, two AA alkaline batteries Red cap x 3, light bulb (battery) replacement wrench, case
Bulbs	L-70 (3V, 0.9W)
Dimensions	Dia. 24 mm x 195 mm (H)
Weight	Approx. 120 g

Can be used as a penlight when the retino-head is detached

Options

Fixation Card Set FC

- Specially designed fixation card set for Neitz retinoscope RX series.



Schematic Eye for Retinoscopy Practice

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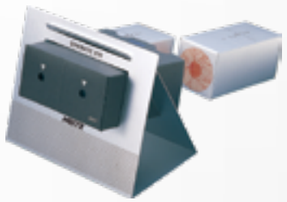
- The Schematic Eye shows the difference between the divergent and convergent beam of light emitted from the retinoscope well.



Stand Schematic Eye for Practice

Colour Vision Test Instrument

OT-II

Anomaloscope

OT-II

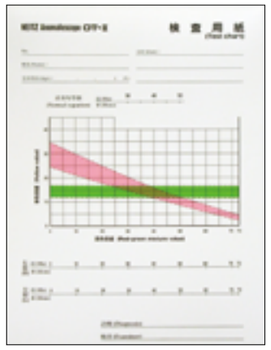
AC

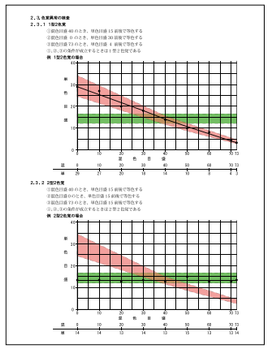
- The instrument for definitive diagnosis of red-green colour deficiency
- Digital display of the anomalous quotient (A.Q.) with easy operation
- Control of the light wavelength by the combination of the LED and interference filter
- Electronic control of the LED light intensity for high reliability of the testing light colour
- The easy-to-read digital display of the colour mix and monochromatic values

Contents	OT-II, power cable, spare fuse, testing paper (50 sheets), dust cover, spare bulb L-50
Power Source	AC100-240V 50/60Hz 15VA
Visual Angle of the Circular Target	2 degrees 10 minutes (for emmetropia)
Dominant Wavelength of the Inspection Light	Red = 670 nm, Yellow = 588 nm, Green = 545 nm
Dimensions	371 mm×125 mm×323 mm
Weight	Approx. 4.5 kg

Natural deterioration of the optical systems may cause errors in the measurement results. Regardless of whether the equipment is used or not, we recommend to have the equipment inspected and calibrated about once a year.

Test Chart for OT-II

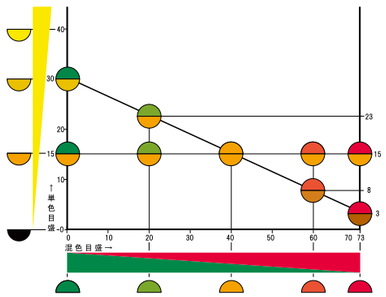




Types of Colour Vision Deficiency

Type of Colour Vision	Protan	Deutan
Dichromatism	Protanope	Deuteranope
Anomalous trichromatism	Protanomal	Deuteranomal

Colour Perception Testing with Neitz Anomaloscope OT-II

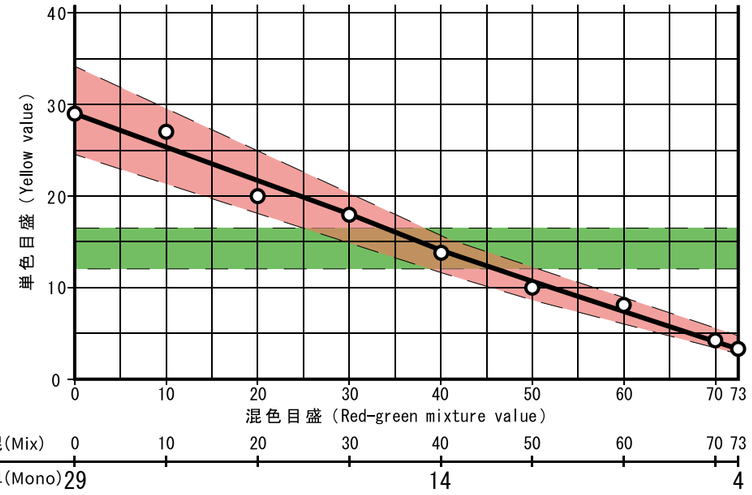


Examples of Diagnosis with Anomaloscope

Fill in the monochromatic values for each mixed colour value and plot them on the graph to see the trends.
If the examinees have normal colour vision, they can see the same colour around 40 (Mixture Value) / 15 (Yellow Value) only.

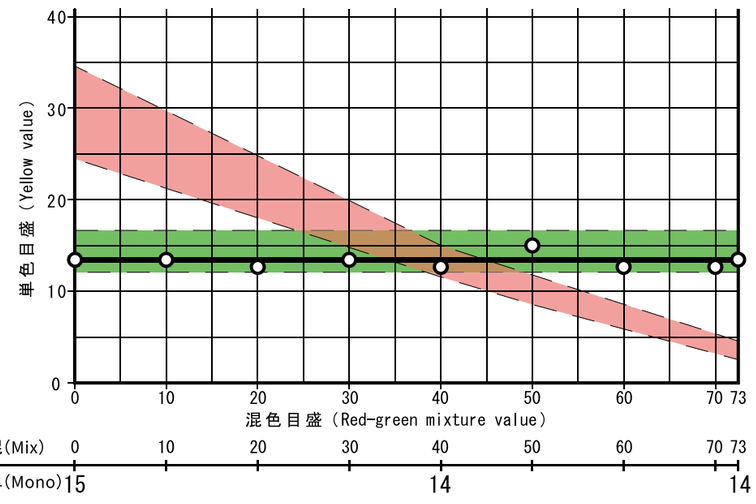
Protanopia

Mixture Value: 40 Yellow Value: approx. 15
Mixture Value: 0 Yellow Value: approx. 30
Mixture Value: 73 Yellow Value: approx. 4



Deuteronopia

Mixture Value: 40 Yellow Value: approx. 15
Mixture Value: 0 Yellow Value: approx. 15
Mixture Value: 73 Yellow Value: approx. 15



Instrument for CFF Value Measurement

HF-II

Handy Flicker

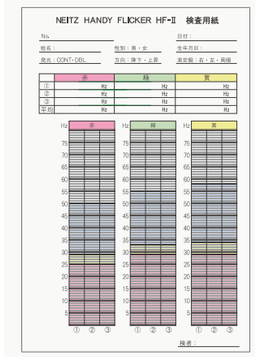
HF-III

PP3

- The specialised instrument for CFF (Critical Fusion Frequency) value measurement
- The three-colour visual targets allow test of eye fatigue and optic nerve disease
- Easy operation with single hand
- Continuous increase / decrease of the frequency at an interval of 1 Hz
- View angle of two degrees at the distance of 25 cm
- Testing paper included in the delivery package for your convenience

Contents	HF-II, USB Adaptor Set, USB Cable (Type-C), visual targets, AA-size battery (2 pcs.),testing paper (50 sheets)
Power Source	AA-size alkaline battery AC100-240V 50/60Hz
Frequency	1 to 79 Hz at an interval of 1 Hz.
Frequency Setting	By up and down push buttons
Accuracy of the frequency	Less than 0.01% (per setting)
Pulse Duty Ratio	50% square wave
Illumination Stability of Targets	Less than 10% (unitl) Warning lamp lights up when the battery power is low
Dimensions	57 mm × 58 mm × 170 mm
Weight	210 g

Targets	LED dominant wavelength of targets: Red = 660 nm, green = 555 nm, yellow = 570 nm.
Target size	Dia. 8.7mm
Dimensions	70 mm x 76 mm x 37 mm
Weight	Approx. 145 g



Penlights

MS-H
MS-II
DL

Halogen Medico Spot

MS-H

AA

- Easily adjustable illumination field
- Bright spot illumination from diameter 40mm to 100mm at a distance of 15cm
- Bright and uniform spot illumination
- The illumination turns on by pressing the switch halfway
- Runs on two AA batteries

Contents	Spotlight MS-H, AA-size alkaline batteries (2 pcs.), pupil diameter sticker
Bulb	L-64(3V, 2W)
Dimensions	Dia. 17.5 mm x 160 mm (H)
Weight	Approx. 92g

Transilluminator

MS-II

AA

- L-shaped illuminator
- Closely illuminates the region to observe such as back of teeth, oral cavity, or pharyngeal
- Best as the index light for examination of eye position using the Red Filter Ladder
- Runs on two AA batteries

Contents	Transilluminator MS-II, AA-size alkaline batteries (2 pcs.), spare bulb L-06
Bulb	L-06 (3V, 0.9W)
Dimensions	Dia. 17.5 mm x 210 mm (H)
Weight	Approx. 90g

Neitz Doctor Light

DL

AAA

- Slim and light-weight pocket light
- The bright illumination field by the two condenser lenses
- Easily turning on and off by the clip switch even in a chest pocket

Contents	Doctor Light, two AAA-size alkaline batteries, spare bulb L-37
Bulb	L-37 (3V, 0.9W)
Dimensions	Dia. 14 mm, 130 mm (H)
Weight	Approx. 50 g

Contact Lens Inspection Instruments

CG-AUTO II
CGX-LED
CL-S

Auto Contact Lens Radius Gauge
(for Contact Lens / Block Lens)

CG-AUTO II

- Modification is available in accordance with the demands of contact lens manufacturers
- No manual focusing required
- Can be controlled via RS-232C by external devices

Contents	Lens mount for wet measurement (for finished lens model only) Lens mount for dry measurement (for finished lens model only) Lens mount (for block lens model only) Test piece (R 7.70), Spare fuses (2 pcs.) Oil dropper, Dust cover, Power cable

Microscope

Magnification	Approx. 100x (objective 10x, ocular 10x)
Illumination	White LED
Unit of measurement	0.001 mm
Display	4-line LCD, 20-digit
Power supply	AC 100 to 240 V 50/60 Hz 60 VA
Measurement object	Value of base curve (BC), value of toric (TC), and central thickness (CT)
Measurement range	R6.0 to R9.9
Unit of display	0.001 mm or 0.01 mm (0.01 mm is only for value of base curve)
Dimensions	230 mm x 390 mm x 630 mm
Weight	Approx. 13.0 kg

Contact Gauge

CGX-LED

- The LED light source saves the trouble to replace bulbs
- The large display improves the visibility of the measurement values
- The radius of curvature of the contact lens can be measured in increments of 0.01mm

Contents	CGX-4LED, syringe, concave lens mount convex lens mount, test ball (7.5R), dust cover, surface mirror, AC adaptor, power cable, eye shield (CGX-3 LED: 1 pc, CGX-4 LED: 2 pcs)

Microscope

Type	Monocular or binocular with 45-degree inclination
Magnification	approx. 75 times (Objective: 5x, Eyepiece: 15x)
Pupil distance	55 mm to 73 mm

Measuring gauge

Display	4-digit LED display
Measurement range	0 to 24 mm
Unit of measurement	0.01 mm

Illuminator

Dimmer	6 steps
Power source	AC 100 V-240 V 50/60Hz 6 VA

Contact Scope

CL-S

- Easily detects scratches and stains on the entire contact lens by switching between epi-illumination and transmitted illumination
- Switchable between two magnifications: 10 and 20 times

Contents	eye shields (2 pcs.), spare fuses (0.6A, 2 pcs.), bulb replacement wrench, spare bulbs (L-35 and L-36), dark-field glass, dark-field ring, dust cover
Magnification	Switchable between 10 and 20 times.
Field of View	At 10 times magnification: dia. 23 mm At 20 times magnification: dia. 11.5 mm
Illumination	Epi-illumination: L-35 (6V, 18W) Transmitted illumination: L-36(6V,18W)
Power Source	AC 100 V-240 V 50/60Hz 25 VA
Dimensions	170 mm x 282 mm x 420 mm
Weight	Approx. 4.6kg

Monocular Radius Gauge

CGX-3 LED

Dimensions	175mm x 240mm x 420mm
Weight	Approx. 5.5 kg

Binocular Radius Gauge

CGX-4 LED

Dimensions	175mm x 240mm x 420mm
Weight	Approx. 5.7 kg

Neitz Pocket View PK Series

Enabling to Observe in a Relaxed Way at Close Range

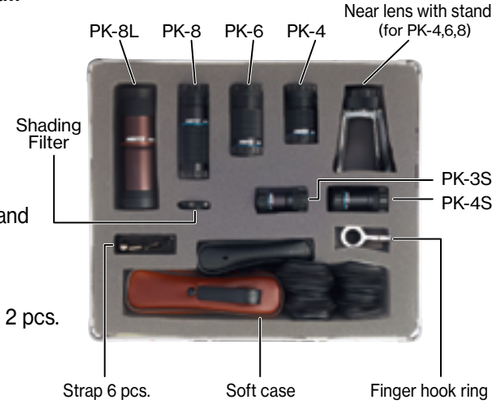
Compact Design to Use Anywhere

Neitz Pocket View PK Series

- Convenient to see small letters (on a blackboard, in a timetable, etc.) at distant
- In combination with a myopia lens, serve as a magnifier with up to approximately 24 times magnification
- Delivered with a specially designed strap and soft case
- Available individually or in a trial set

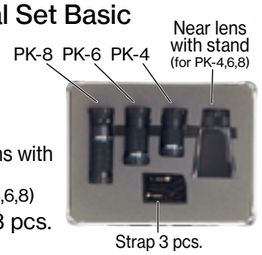
PK Trial Set Full

- PK-3S
- PK-4
- PK-4S
- PK-6
- PK-8
- PK-8L
- Near lens with stand (for PK-4,6,8)
- Strap 6 pcs.
- Shading Filter
- Finger hook ring 2 pcs.
- Soft case



PK Trial Set Basic

- PK-8
- PK-6
- PK-4
- Near lens with stand (for PK-4,6,8)
- Strap 3 pcs.



	PK-3S	PK-4S	PK-4	PK-6	PK-8	PK-8L
Magnification at infinity	2.8x	4.2x	4x	6x	8x	8x
Magnification at the closest	3.6x	5.3x	5.5x	7.6x	11x	10x
Shortest working distance	15cm	20cm	20cm	23cm	30cm	70cm
Exit pupil diameter (infinity)	3.2mm	2.4mm	3.0mm	2.7mm	2.5mm	4.0mm
Exit pupil position (infinity)	12mm	13.5mm	11.5mm	10.5mm	10.5mm	18.0mm
Real field of view at infinity	12.5°	10.0°	12.5°	9.3°	7.0°	7.8°
Real field of view at tangent 100m	22/100m	17/100m	22/100m	16/100m	12/100m	13/100m
Apparent field of view	35°	42°	50°	56°	56°	62°
Approx. Weight	28.5g	30.5g	55g	65g	82g	180g
Outer dimensions	ϕ22 x 46 to 51 mm	ϕ22 x 51 to 56 mm	ϕ31 x 58 to 73 mm	ϕ31 x 72 to 94 mm	ϕ31 x 98 to 137 mm	ϕ41 x 135 to 167 mm
Dimensions of the near lens with stand	-		61 x 53 x 88mm			

Neitz Binocular Loupes

Step 1
Select the loupes

Step 2
Select the frame or headband

Step 3
Select the LED Illuminator

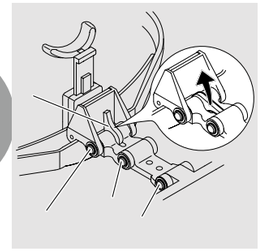
Step 4
With or without camera

Five Advantages of Neitz Binocular Loupes

1

Adjustable observation distance by rotating the lens barrel

2



Readily returns to the original position after flipping up the loupe by three-arm hinges and stopper

3

Durable and flexible domestically produced NEO Frame with an excellent fit

4

The easily replaceable forehead pad will keep your loupes clean

5

Two types of nose pads are included in the delivery package.
Choose either one fits you better.

Step 1

Select the loupes

	BLS-2	BLS-3	BLD-3	BLP-4	BLP-6
	Galilean Loupes			Prismatic Loupes	
Magnification*	2.0 to 2.5x	2.5 to 3.0x	2.5 to 3.0x	4.0 to 4.5x	5.5 to 6.0x
Working Distance (mm)	550 to 350	550 to 350	350 to 250	550 to 350	550 to 350
Field of View Diameter(mm)	Φ113 to 58	Φ78 to 38	Φ80 to 50	Φ80 to 50	Φ40 to 25
Mounting options	NEO Frame or Headband	NEO Frame or Headband	NEO Frame or Headband	NEO Frame or Headband	NEO Frame or Headband
For Use in	Orthopedics, Cardiovascular surgery, Ophthalmology, Brain surgery, Plastic surgery, Digestive surgery, Otorhinolaryngology surgery, Urology, Cardiothoracic surgery, Neurosurgery, General surgery, etc.	Orthopedics, Cardiovascular surgery, Ophthalmology, Brain surgery, Plastic surgery, Digestive surgery, Otorhinolaryngology surgery, Urology, Cardiothoracic surgery, Neurosurgery, General surgery, etc.	Dentistry	Micro surgery, Hand and foot surgery, Breast surgery, Ophthalmology, etc.	Micro surgery, Hand and foot surgery, Breast surgery, Ophthalmology, etc.
Options	LED Illuminators, Full HD Camera System	LED Illuminators, Full HD Camera System	LED Illuminators, Full HD Camera System	LED Illuminators, Full HD Camera System	LED Illuminators, Full HD Camera System

*Depends on the Working Distance.

Step 2

Select the frame
or headband

NEO Frame

- Highly strong and flexible at the same time. Provides exceptional fit and comfort for the user.
- The weight was reduced as far as possible. The load was distributed to three points: nose, forehead, and back of head. Suitable for a long-time use.
- Wide range of colour variations. Frame is available in three colours and ear pad in six colours. Choose your favorite colours

Headband

- Made of durable and flexible materials.
- The soft and lightweight headband reduces the burden of the device and distributes by covering the entire head.
- Outstanding stability to reduce the fatigue due to long time use.

	with NEO Frame	with Headband
BLS-2	82 g	246 g
BLS-3	76 g	240 g
BLD-3	71 g	235 g
BLP-4	94 g	258 g
BLP-6	97 g	261 g

Step 3

Select the LED Illuminator

NSI-X

- The illumination field diameter is available in 80 mm for higher brightness and in 100 mm for a wide angle illumination.
- The world-class maximum light intensity of 32,000 lux at the illumination field diameter of 100 mm.
- Continuous operation for approximately three and half hours at the maximum light intensity.
- The compact and lightweight illuminator reduces the burden on the user's head and nose.
- The super large-capacity battery with fast charging time of three hours.

NSI-X

		NSI-X	NSI-X
Illumination Field Diameter (mm)at 400mm distance		Φ80	Φ100
Light Intensity at 400mm distance	Maximum Light Intensity	Approx. 38,000Lx	Approx. 32,000Lx
	Middle Light Intensity	Approx. 22,000Lx	Approx. 19,000Lx
Light Source		3W White LED	
Illumination Colour Colour temperature		Cool White 6500K	
Mounting options		NEO Frame or Headband	
Rechargeable battery type power source		Ni-MH battery	
Continuous Illumination Time	Maximum Light Intensity	Approx. 3.5 hours	
	Middle Light Intensity	Approx. 7.5 hours	
Dimensions (mm)	Battery Pack	88.5×68×22	
	Illuminator	Φ23×34.6	
Approx. Weight (g)	Battery Pack	190	
	Illuminator	19	

BINOCULAR LOUPE TTL

The original design prevents the barrel from falling off.

Just like eyeglasses, simply put on and use immediately.

The working distance is adjustable.

Magnification	2.0x to 2.5x
Working Distance (mm)	550 to 350
Field of View Diameter (mm)	113 to 58
Pupil Distance (mm)	BTL-2N: 56 BTL-2S: 62
Declination Angle	40°
Weight (g)	95

Step 4

With or Without Camera

Binocular Loupes BLS-2
NEO+LED Illluminator NSI-X+SC-1

SC-1

- Clear and high-definition image with the latest CMOS imaging sensor
- Natural colours and textures while reducing image degradation
- The system can be matched with the colour temperatures of the illumination with one touch

The Surgical Camera that Proposes A Solution To Your Problem

High quality images
The Neitz full HD camera has high sensitivity and full high definition.
The specially designed software allows to play the recorded image easily.
The image can be used to prepare materials for in-house conferences and academic meetings.

Natural colours and textures
Provides clear and high-definition images while reducing image degradation.
The system can track and record the details of the surgical field with precision, which allows the user to use at ease in a medical setting where high level of reproducibility is required.

Use in combination with a shadowless lamp and Neitz LED illuminators
The system can be matched with the colour temperatures of the illumination with one touch action.
High quality image recording by enhancing the colour reproducibility.

Effective pixels	2.13 mega pixels 1945(H)×1097(V)Pixels CMOS colour image sensor IMX291 (Sony) 1/2.8 inch 6.46 mm diagonal
Transfer method	Progressive
Shutter System	Rolling Shutter
Output Image Format	MJPEG
Data Transfer System	USB2.0 (Hi Speed)
Max. Frame Rate	VGA 640×480 Pixels : 30fps HD 1280×720 Pixels : 30fps FHD 1920×1080 Pixels : 30fps
Sensitivity（F5.6）	1300 mV CMOS sensor characteristics typical value
Driver	Not needed. USB Video Class (UVC) Windows10
Interface	USB Mini-B
Main IPS Functions	Adjustment: exposure (auto & manual), colour temperature (auto & manual), gain, saturation, sharpness, and gamma correction
Power Supply Voltage	5.0V (USB bus power)
Max Power Consumption	Approx. 200 mA
Dimensions	20×20×23.4 mm (without protrusion)
Weight	Approx. 12 g

Actual size

Recording area of lens units

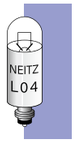
f16 lens is included in the standard accessories.

Lens unit / Shooting distance*	f8 lens	f12 lens	f16 lens	f25 lens
				
250 mm	90 x 160 mm	55 x 100 mm	40 x 70 mm	25 x 45 mm
350 mm	125 x 220 mm	70 x 125 mm	60 x 105 mm	40 x 70 mm
400 mm	145 x 260 mm	90 x 160 mm	70 x 125 mm	45 x 75 mm
550 mm	205 x 365 mm	130 x 230 mm	100 x 180 mm	60 x 105 mm
"Recommended loupe (Magnification)	BLS-1 (1.5 to 2.0x)	BLD-3 (2.5 to 3.0x)	BLS-2(2.0 to 2.5x) BLS-3(2.5 to 3.0x) BLP-4(4.0 to 4.5x)	BLP-6 (5.5 to 6.0x)

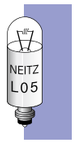
*From front of SC-1

Accessories

Bulbs

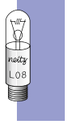


L-04
Power Rating: 4V, 3.6W
For: Streak Retinoscope R1, RX-1
Lifetime: 20h



L-05
Power Rating: 3V, 1.5W
For: Spot Retinoscope R1-3SP, RX-3SP
Lifetime: 10h

L-06
Power Rating: 3V, 0.9W
For: Otoscope α-No.4
Laryngoscope α-No.5
Transilluminator MS-II
Lifetime: 20h

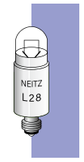


L-08
Power Rating: 12V, 7.2W
For: Flash Booster, Euthyscope
Lifetime: 30h

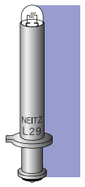
L-09
Power Rating: 12.5V, 60W
For: Slit Lamp SL-J
Lifetime: 25h

L-11
Power Rating: 6V, 12W
For: Contact-Gauge CG, CGX
Lifetime: 100h

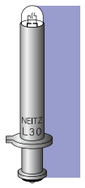
L-27
Power Rating 4V, 2.6W
For: Streak Retinoscope RX-2, RX-RC, RX-RP
Lifetime: 5h



L-28
Power Rating: 3V, 1.2W
For: Streak Retinoscope RX-3, RX-3A
Lifetime: 5h

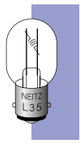


L-29
Power Rating: 4V, 2.5W
For: Halogen Ophthalmoscope BXα-12, BXα-RC, BXα-RP
Lifetime: 20h



L-30
Power Rating: 3V, 2W
For: Halogen Ophthalmoscope BXα-13, BXα-13A
Lifetime: 20h

L-32
Power Rating: 3.6V, 1.6W
For: Spot Retinoscope RX-RCSP
Lifetime: 10h



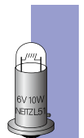
L-35
Power Rating: 6V, 18W
For: Contact Scope CL-S
Lifetime: 100h

L-36
Power Rating: 6V, 18W
For: Contact Scope CL-S
Lifetime: 100h

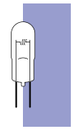
L-37
Power Rating: 3V, 0.9W
For: Doctor Light DL
Lifetime: 4.5h

L-38
Power Rating: 3V, 2W
For: Halogen Pocket Ophthalmoscope GH
Lifetime: 20h

L-50
Power Rating: 8V, 8W
For: Anomaloscope OT-II
Lifetime: 100h

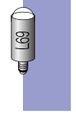


L-51
Power Rating: 6V, 10W
For: Halogen Indirect Ophthalmoscope IO-α
Lifetime: 300h



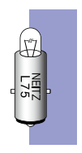
L-63
Power Rating: 6V, 20W
For: Auto Contact Gauge CG-AUTO
Lifetime: 100h

L-64
Power Rating: 3V, 2W
For: Halogen Medico Spot MS-H
Lifetime: 40h



L-69
Power Rating: 3V, 2W
For: Fibre Otoscope FO, α-34FO
Lifetime: 80h

L-70
Power Rating: 3V, 0.9W
For: Pocket Retino Light ORT-Y
Lifetime: 50h



L-75
Power Rating: 10V, 5.5W
For: Monocular Indirect Ophthalmoscope BS-II
Lifetime: 50h

LED Lamp for IO-α LED
For IO-α LED

Rechargeable batteries

1000RS
For: Ophthalmoscope BXα-RC, Retinoscope RX-RC
Charging Time: 15 h
Continuous operating time: 1.5 h

RP-B
For: Ophthalmoscope BXα-RP, Retinoscope RX-RP
Charging Time: 15 h
Continuous operating time: 0.5 h