Product Specifications

Product name	: Neitz Binocular Indirect Ophthalmoscope IO-α LED CAMERA
Generic name	: Binocular Indirect Ophthalmoscope
Image sensor	: 1945 (H)x1097 (V) Approximately 2.13 Megapixels CMOS Sensor
Capture range	: Distance: Approximately 250 mm to 550 mm. Height adjustment range: ±0.7°, ±1.4° (2 steps)
Maximum frame rate	: 30 fps
Interface	: USB -TypeA
Power supply	: Power supply voltage 5.0 V (USB bus power). Maximum power consumption approximately 200mA
Illumination source	: Warm White LED
Filters	: Standard: Polarizing, UV, Red-free. Optional: Polarizing, UV, Cobalt Blue
Illumination field diameter	: Φ19 mm/Φ39 mm / Φ60 mm *1
Maximum illuminance	: Approximately 600 lx (using the UV filter) *1
PD adjustment range	: 54 mm to 74 mm
Minimal pupil diameter	: Φ2 mm
Continuous illuminating time	: Approximately 5 hours at maximum intensity (reference value) *2
Incorporated battery	: Rechargeable lithium-ion battery (3.7V)
Charging time	: Approximately two hours (reference value)*2
Weight and dimensions	: (Scope unit) 164mmx116.5mmx102.5mm (excluding headband) / Approximately 730g (Headband circumference) Approximately 520mm to 640mm (Battery pack) 90 mmx 45 mmx 30 mm (excluding protrusions) / Approximately 90g

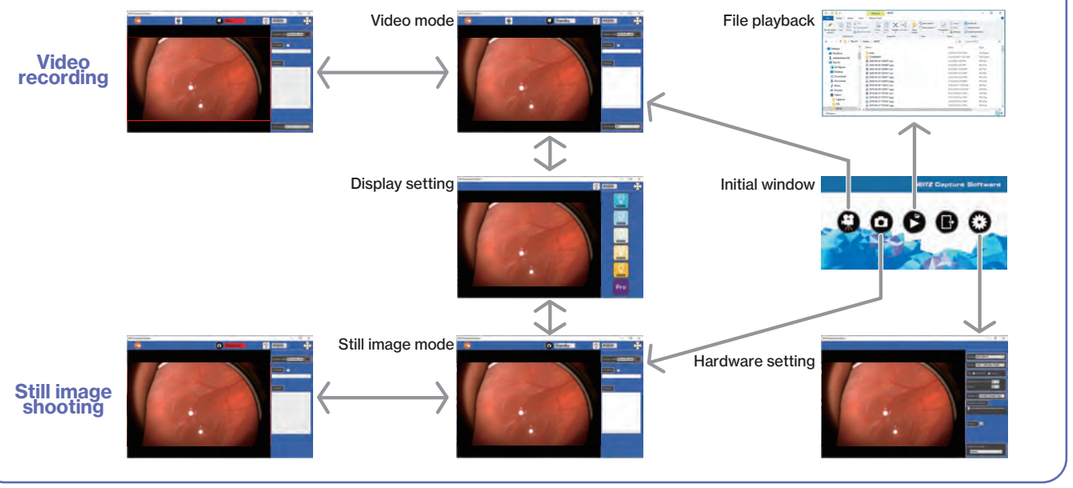
*1 Measured at 500mm
*2 Reference value for new battery

Capture Software

[Basic performance]	Camera	: Compatible with USB cameras provided by Neitz
	File format	: Video MP4 / AVI (sound recordable). Still image JPG
	Resolution setting	: Selectable from VGA, HD, or FHD
	Display languages	: English and simplified Chinese
	Reverse image	: Horizontal and vertical flip
	Colour temperatures	: Selectable from 6000/5500/5000/4500/3300K (In the simple setting window)
[System requirements and operating system]		: Windows10/11. Memory: 8GB or more. Clock frequency 2.5 GHz or more. Monitor: Full HD 1920 x1080 or more recommended.

(Refer to the separately provided User's Manual for software details.)

Special Capture Software for SC-1 (NEITZ Capture Software)



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Distributor

NEITZ
Made by Neitz for Your Medical Field

NEW MODEL

Neitz Binocular Indirect Ophthalmoscope with Camera

IO-α LED CAMERA

High Sensitivity Full HD 1080

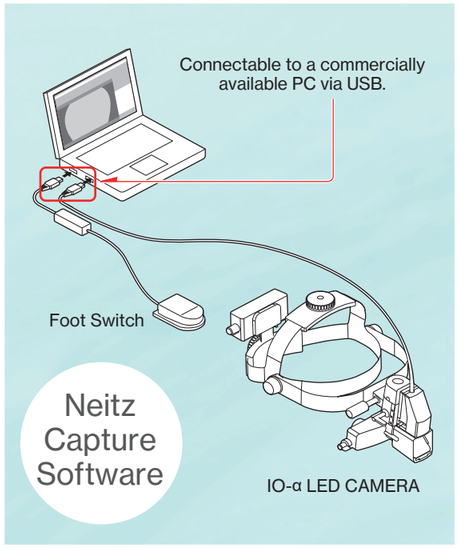
Full HD High Resolution SC-1 Series

IO-α LED CAMERA

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

The Neitz binocular indirect ophthalmoscope with camera IO-α LED CAMERA is a system of ophthalmoscope and highly sensitive FHD digital camera with the latest CMOS image sensor.
IO-α LED CAMERA is capable to provide and record the fundus image in still and motion picture.
IoT live streaming allows to share the digital image and sound realistically in the place where you want; in a treatment, training or operation room, even in a distant area or disaster site.
Sharing more recorded visual and audio data will serve for training of trainee doctors and medical staff.
Digital images will be also useful when explaining to the patient and family members.
The high-quality digital imaging solutions of Neitz support to streamline the medical services and medical safety measures.

Features of the IO-α LED CAMERA



High quality and high definition image

A highly sensitive FHD camera system equipped with the latest CMOS image sensor that tracks and records the details with precision.

Reproducibility with natural colours and textures

Provides clear and high-definition images while reducing image degradation. The user can use at ease in a medical setting where high level of reproducibility is required.

Capturing position adjustment and polarizing filter

The capturing position adjustment eliminates the parallax and camera image misalignment. The polarizing filter enables to capture clear images.

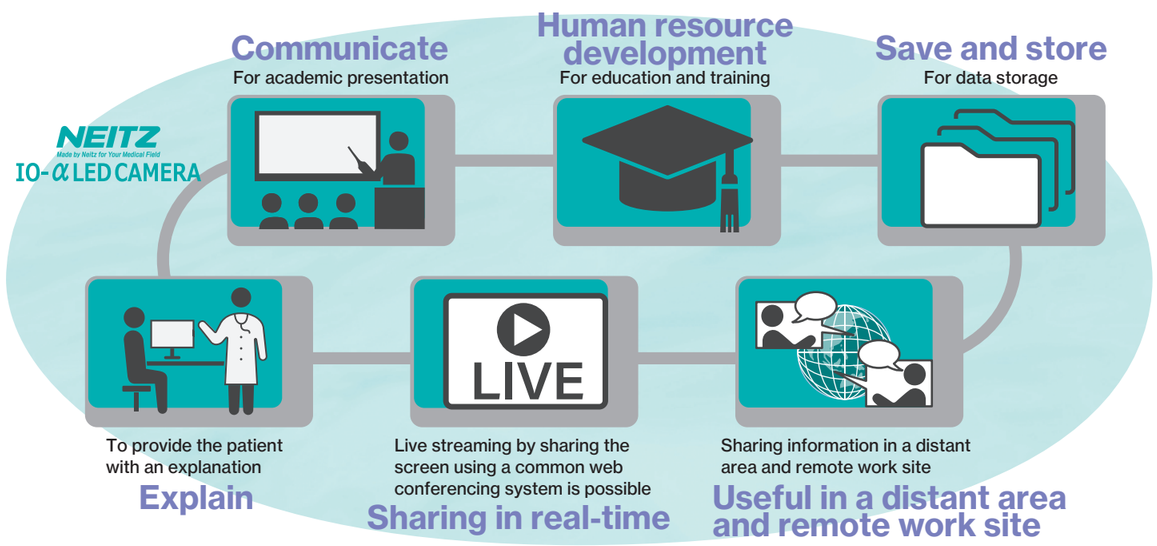
The original Neitz Capture Software

The image system operations of the originally developed Neitz Capture Software is integrated into icons to save the effort to initialize the settings.

The ultimate sensitivity effective to use for pediatric retinal diseases

The ultimate sensitivity allows to record an image of an eye with a small diameter. Suitable for observing the fundus of pediatric retinal diseases such as a retinopathy of prematurity and active stage classification.
Allows also observing the fundus of infants in NICU.

Solutions provided by the IO-α LED CAMERA



Battery indicator

The colour of the LED in the right of this symbol shows the remaining battery amount.

Output switch

Turns on and off the output from the battery pack.
Stepless output level adjustment is possible via this switch.

Charge lamp

The colour of the LED in the right of this symbol shows the status of the battery charging.
* The illumination does not light up while charging.

NEW

Filter selection lever

Allows for switching between Polarizing filter (top), UV filter (middle), and Red-free filter (bottom).
The new Polarizing filter reduces projections of light reflection and provides clear images.

Focus lever

Adjusts the focus of the camera unit by moving it forward and back.

Observation angle adjustment levers

Adjust the observation angle. Levers located on both sides of the scope unit are coupled and move in conjunction.

Illumination angle adjustment levers

Adjust the illumination angle. Levers located on both sides of the scope unit are coupled and move in conjunction.

* The Neitz System allows the user to move the levers of the illumination system and observation system separately. This enables fundus observation using the effective field of view widely.

Aperture selection lever

Switches the area of the illumination field among 19 mm / 39 mm / 60 mm (at 500 mm distance).

NEW

Height adjustment knob

A new feature. Turn this knob to adjust the height of your capturing position.
The height adjustment ranges are ±0.7 / ±1.4° (2 steps).

Pupil distance (PD) adjuster

Adjusts the pupil distance accoring to the user from 54mm to 74mm.