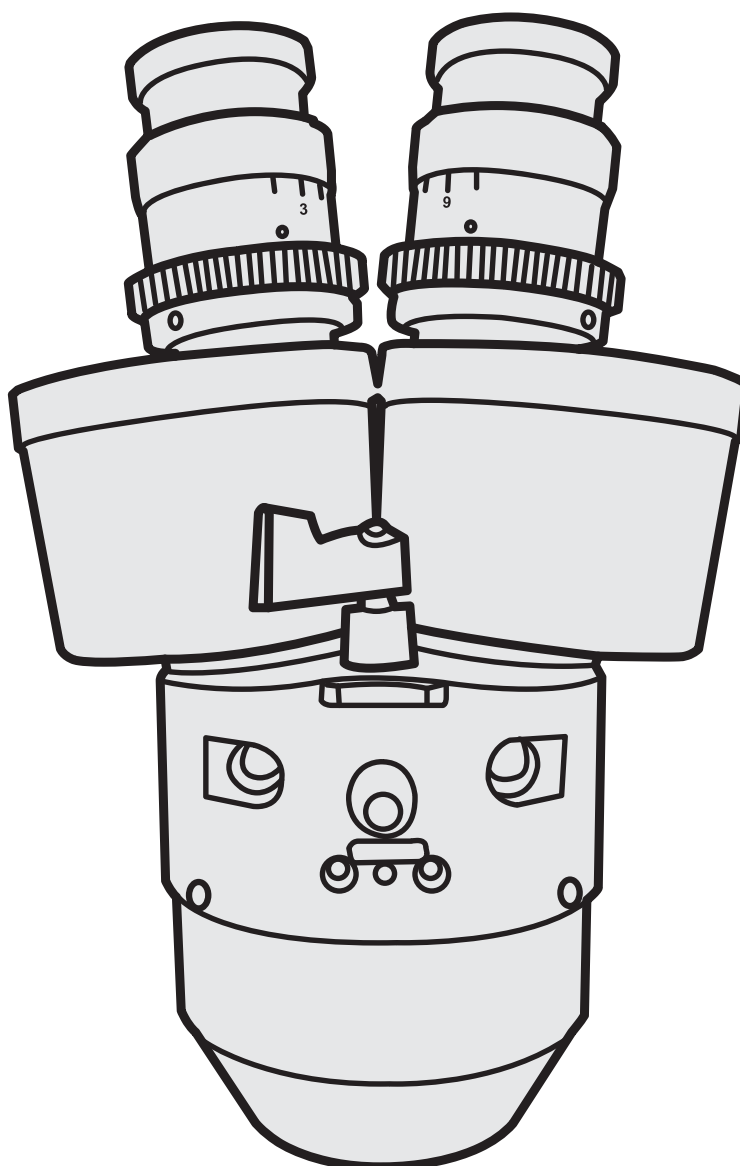


LED & Halogen SLIT LAMP

Quality Optics



MADE IN JAPAN

Here comes the LED

PHAROS LED
 **EGG LED**

- ✓ **Sharp and even illumination**
- ✓ **Environmentally-friendly**
- ✓ **Powerful and long-lasting light source**
- ✓ **Less stress to patient's eye**

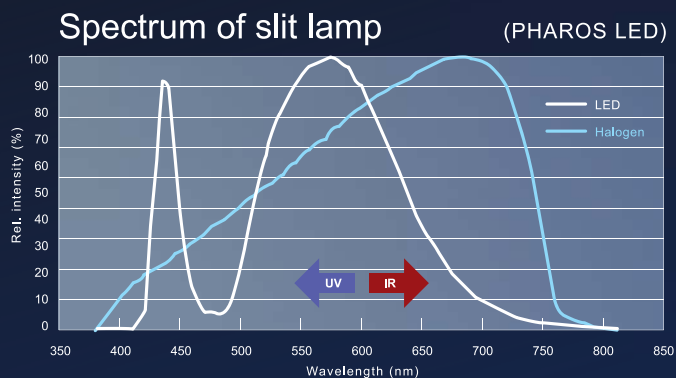
Inami's slit lamp series "PHAROS" and the high-end model "EGG" now have LED powered version.

The original LED technology optimises the spectrum of light for sharp, clear and even observation.

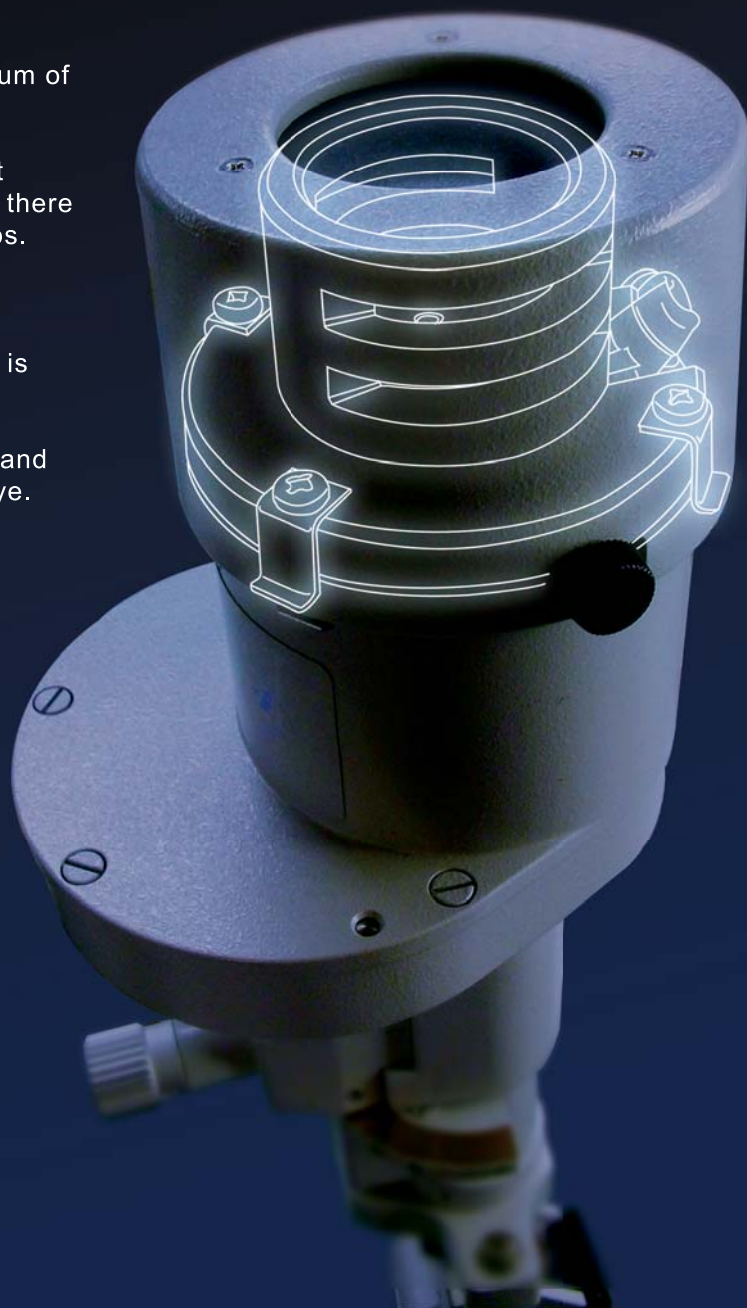
One of the most valuable advantages of LED light source is that it lasts nearly lifetime which means there will be no need to purchase and change light bulbs.

Even if the LED lamp house needs to be changed somehow, users do not have to change the whole column part since the lamp house assembly itself is replaceable.

This energy saving light source generates no UV and less heat, which reduces the stress to patient's eye.



Inami's LED spectrum is specially designed to ensure the best setting for various kinds of slit lamp observation.



6



Lamp house of L-0185
Halogen type

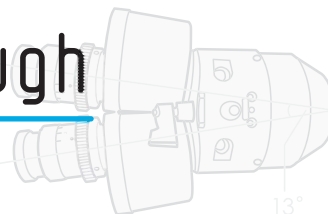


L-0185-LED

Greenough

LED: L-0185-LED

Halogen: L-0185



With built-in C-mount (factory option)
camera can be attached



Continuous light
volume controller
for fine adjustment



Colour selectable
base top for your
interior theme



Built-in yellow filter
for clearer fluorescein
images



Convergent
optics for user's
comfort



Half-moon type column
for laser system
attachment



Light booster
for momentary
extra-brightness
(halogen type only)



Digital camera
controlable base for
easy photography
(activating this function is optional)

3



Lamp house of L-0187
Halogen type

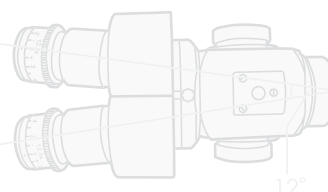


L-0187-LED

3 Steps

LED: L-0187-LED

Halogen: L-0187



Continuous light
volume controller
for fine adjustment



Colour selectable
base top for your
interior theme



Digital video camera
beam splitter can be
attached



Convergent
optics for user's
comfort



Half-moon type column
for laser system
attachment



Light booster
for momentary
extra-brightness
(halogen type only)



Digital camera
controlable base for
easy photography
(activating this function is optional)

5



Lamp house of L-0189
Halogen type



6x 10x 16x 25x 40x

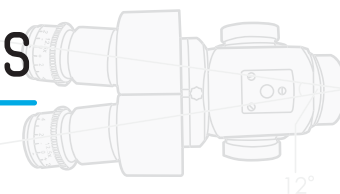


L-0189-LED

5 Steps

LED: L-0189-LED

Halogen: L-0189



12°



Continuous light
volume controller
for fine adjustment



Colour selectable
base top for your
interior theme



Digital video camera
beam splitter can be
attached



12°

Convergent
optics for user's
comfort



Half-moon type column
for laser system
attachment



Light booster
for momentary
extra-brightness
(halogen type only)

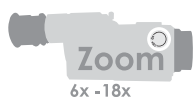


Digital camera
controlable base for
easy photography
(activating this function is optional)

7



Lamp house of L-0240
Halogen type



6x - 18x

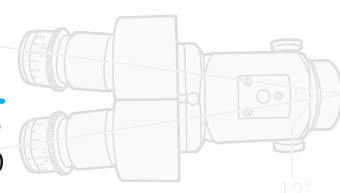


L-0240-LED

Zoom

LED: L-0240-LED

Halogen: L-0240



12°



Continuous light
volume controller
for fine adjustment



Colour selectable
base top for your
interior theme



Digital video camera
beam splitter can be
attached



12°

Convergent
optics for user's
comfort



Half-moon type column
for laser system
attachment



Light booster
for momentary
extra-brightness
(halogen type only)



Digital camera
controlable base for
easy photography
(activating this function is optional)

Versatility

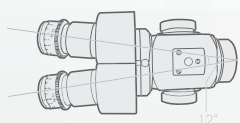
EGG SLIT LAMP

Digital Camera Compatible

LED: L-0229-E-LED

Halogen: L-0229-E

L-0229-E-LED and L-0229-E Digital Camera Compatible Slit Lamp Microscope "EGG" are ideal for taking digital images both still and movie by our digital video camera beam splitter L-0541DC-1.3. All the extended functions were thoroughly designed for your comfort.



Continuous light volume controller for fine adjustment



Convergent optics for user's comfort



S.I. Grande for 14mm illumination field

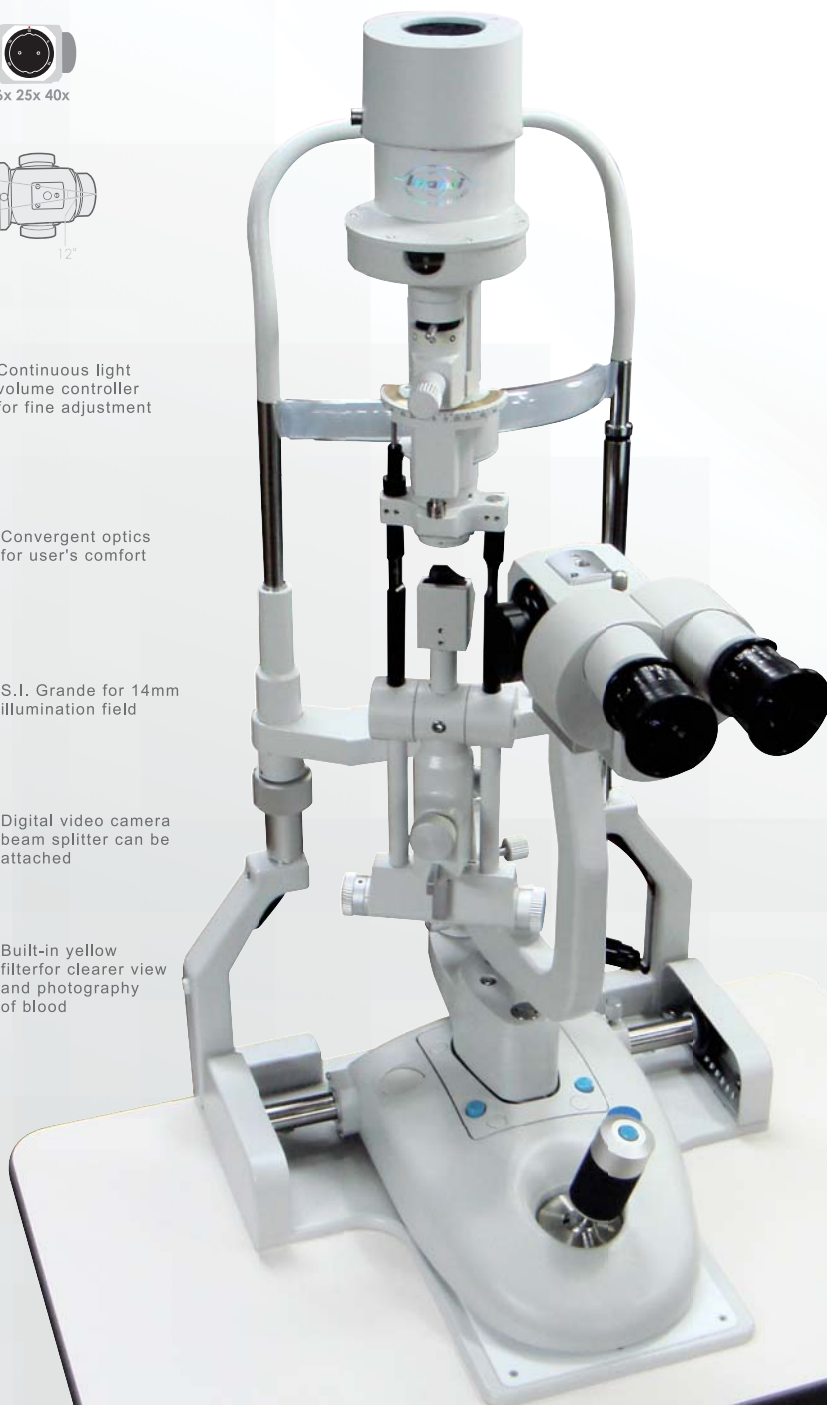


Digital video camera beam splitter can be attached

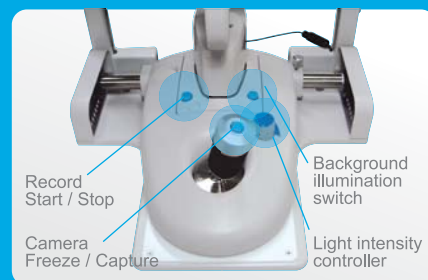


Built-in yellow filter for clearer view and photography of blood

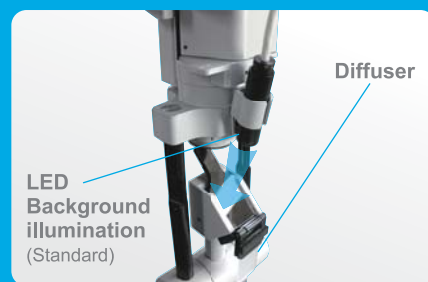
(Light source side)



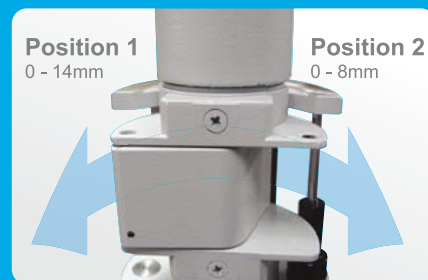
L-0229-E-LED



The Joy-stick features a shutter release, a video recording function, a background illumination switch and a light intensity control. Everything is on the unique shaped base of this slit lamp for ease of use. Still images and videos can be taken in one position.



L-0229-E-LED and L-0229-E feature the LED background illumination system which allows you to take clear and bright images of slit light. The light intensity of LED is set within the extent that does not give too much damage to human eyes. The light diffuser is useful when the full view of an eye is observed.



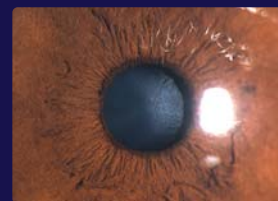
The unique function of L-0229-E-LED and L-0229-E called "S.I. GRANDE" enables you to optically change the illumination field up to 14mm by single click action. This is ideal for contact lens fitting observation. "S.I. GRANDE" is registered as Inami's patent.



Lamp house of L-0229-E Halogen type

EGG LED
EGG

Digital Imaging



L-0541DC-1.3

Digital Video Camera Beam Splitter



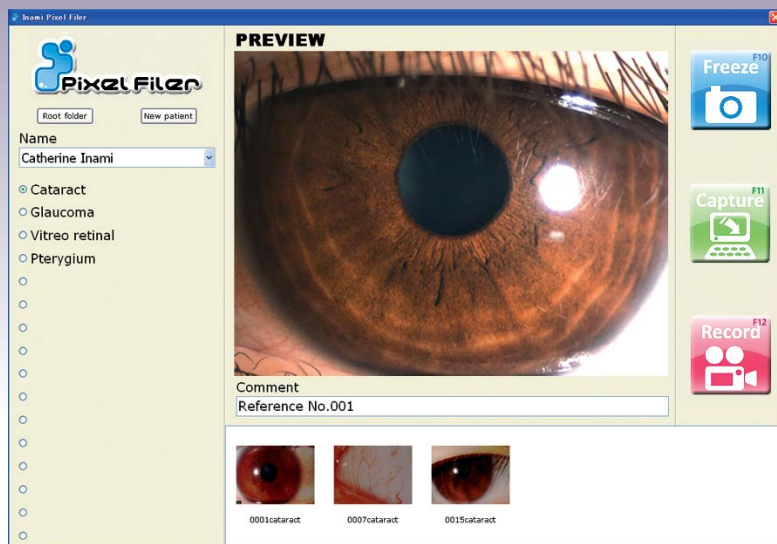
LED external background illumination (option)



Foot remote controller (option)

SPECIFICATIONS

| | | | |
|------------------------------------|---|---|--|
| Image Sensor Type | Sony progressive scan interline transfer CCD's with square pixels and global shutter | Digital Interface | automatic / manual modes, programmable via software, 0.01 ms to 66 ms |
| Image Sensor Model | ICX445 1/3" h EXview HAD CCD(TM) | Transfer Rates | 2 W (max) at 5 V |
| Maximum Resolution | 1280(H) x 960(V) | Partial Image Modes | pixel binning and region of interest modes via Format_7 |
| Pixel Size | 3.75 µm x 3.75 µm | General Purpose I/O Ports (For advanced use only) | 7-pin JST GPIO connector, 4 pins for trigger and strobe, 1 pin +3.3 V, 1 VEXT pin for external power |
| Analog-to-Digital Converter | 5-pin Mini-B USB 2.0 digital interface for camera control, video data transmission, and power | Gain Control | automatic / manual / one-push gain modes, programmable via software, 0 dB to 24 dB in 0.04 dB increments |
| Video Data Output / Max Frame Rate | 15FPS / 1296x964 Y8 at 18 FPS | Shutter Speed | automatic / manual / one-push modes, programmable via software, 0.01 ms to greater than 10 seconds |
| Image Data Formats | automatic / manual gain modes, programmable via software, 0 dB to 24 dB in 0.04 dB increments | Power Consumption | 2 W (max) at 5 V |



FREE!
When you buy
L-0541DC-1.3

Pixel Filer Ver. 2.0
Image Filing System by Inami

An easy-to-use application for taking pictures, capturing videos and sorting files is included in a package of L-0541DC-1.3. Categories of images can be freely edited and a comment can be added to an image captured. 6 camera property settings can be stored for different types of observation. For quick start, 6 preset camera property settings are available as soon as the system is installed.

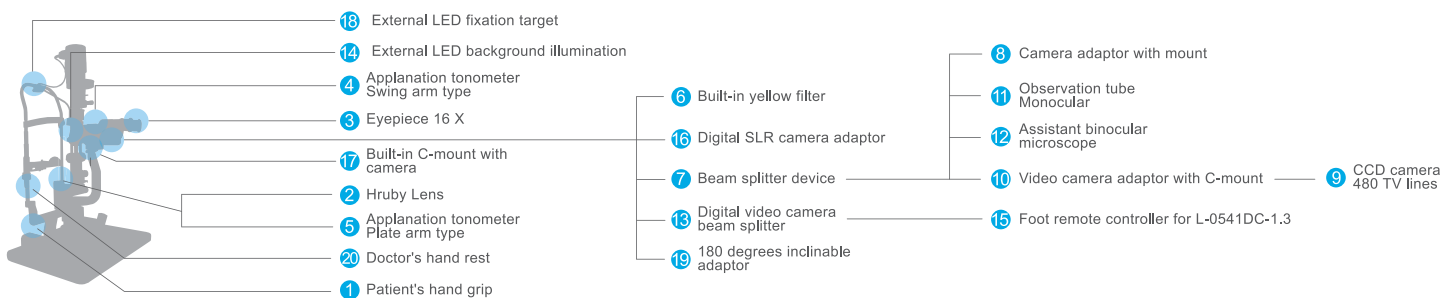
Specifications

| | Standard / Option | L-0185-LED (LED) L-0185 (Halogen) | L-0187-LED (LED) L-0187 (Halogen) | L-0189-LED (LED) L-0189 (Halogen) | L-0240-LED (LED) L-0240 (Halogen) | L-0229-E-LED (LED) L-0229-E (Halogen) |
|---|-------------------|--|--|--|--|--|
| Microscope | | | | | | |
| Type | | Greenough Type Stereoscopic Microscope | Convergent Type Binocular Microscope | Convergent Type Binocular Microscope | Convergent Type Binocular Microscope | Convergent Type Binocular Microscope |
| Magnification Changer | | 2 steps by changing knob | 3 steps by drum rotation | 5 steps by drum rotation | Continuous Zoom by drum rotation | 5 steps by drum rotation |
| Stereo angle | | 13° | 12° | 12° | 12° | 12° |
| Eyepiece | Standard | 10x | 12.5x | 12.5x | 12.5x | 12.5x |
| | Option | 16x | — | — | — | — |
| Magnification Ratio (Field of View) | | 10x (20.13mm) 16x (16.13mm) | 10x (28.5mm) 16x (14mm) 25x (7mm) | 6x (38mm) 10x (24mm) 16x (15mm) 25x (9mm) 40x (6mm) | Continuous from 10x ~ 30x (22mm~8mm) | 6x (38mm) 10x (24mm) 16x (15mm) 25x (9mm) 40x (6mm) |
| Pupillary Adjustment | | 52 - 90 mm | 53 - 83 mm | 53 - 83 mm | 53 - 83 mm | 53 - 83 mm |
| Focus Distance | | 100 mm | 106 mm | 106 mm | 106 mm | 106 mm |
| Diopter Adjustment | | + 8 to -8 diopters | + 8 to -8 diopters | + 8 to -8 diopters | + 8 to -8 diopters | + 8 to -8 diopters |
| Slit Illumination | | | | | | |
| Slit Width | | 0 -10 mm | 0 -10 mm | 0 -10 mm | 0 -10 mm | 0 -14 mm |
| | | — | — | — | — | 0 -8 mm (S.I. GRANDE position 2) |
| Aperture Diameter | | 0.2, 1, 3, 4, 6, 10 mm | 0.2, 1, 3, 4, 6, 10 mm | 0.2, 1, 3, 4, 6, 10 mm | 0.2, 1, 3, 4, 6, 10 mm | 0.3, 1.4, 4.2, 5.5, 8.3, 14 mm |
| | | — | — | — | — | 0.2, 0.8, 2.4, 3.2, 4.8, 8mm (S.I. GRANDE position 2) |
| Slit Length | | 0 -10 mm | 0 -10 mm | 0 -10 mm | 0 -10 mm | 0 -14 mm |
| | | — | — | — | — | 0 -8 mm (S.I. GRANDE position 2) |
| Slit Rotation | | ± 90° | ± 90° | ± 90° | ± 90° | ± 90° |
| Filters | Standard | Cobalt blue, Heat absorption, Red-free, 1/2 ND | Cobalt blue, Heat absorption, Red-free, 1/2 ND | Cobalt blue, Heat absorption, Red-free, 1/2 ND | Cobalt blue, Heat absorption, Red-free, 1/2 ND | Cobalt blue, Heat absorption, Red-free, 1/2 ND, Yellow |
| | Option | UV, IR, 1/10 ND etc. (To be replaced with standard filters) Built-in binoculars yellow filter (YF-57) | UV, IR, 1/10 ND etc. (To be replaced with standard filters) Built-in binoculars yellow filter (YF-57) | UV, IR, 1/10 ND etc. (To be replaced with standard filters) Built-in binoculars yellow filter (YF-57) | UV, IR, 1/10 ND etc. (To be replaced with standard filters) Built-in binoculars yellow filter (YF-57) | UV, IR, 1/10 ND etc. (To be replaced with standard filters) Built-in binoculars yellow filter (YF-57) |
| Slit Inclination | | 5° 10° 15° 20° | 5° 10° 15° 20° | 5° 10° 15° 20° | 5° 10° 15° 20° | 5° 10° 15° 20° |
| Light Source | | LED: (Orange) 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1) | LED: (Orange) 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1) | LED: (Orange) 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1) | LED: (Orange) 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1) | LED: (White) 14VDC 1A Halogen: Lamp bulb 12V/50W (L0160H1) |
| Max. intensity (Lux) | | 45,000Lux | 45,000Lux | 45,000Lux | 45,000Lux | 58,000Lux |
| Background Illumination | | | | | | |
| Light Source | | — | — | — | — | 15VDC 0.1A |
| Base | | | | | | |
| Vertical Movement | | 30 mm | 30 mm | 30 mm | 30 mm | 30 mm |
| Longitudinal Movement | | 79 mm | 79 mm | 79 mm | 79 mm | 80mm (Optional 103 mm is also available) |
| Lateral Movement | | 115 mm | 115 mm | 115 mm | 115 mm | 115 mm |
| Fine Base Movement | | ± 10 mm | ± 10 mm | ± 10 mm | ± 10 mm | ± 10 mm |
| Colour selectable base | | Selectable | Selectable | Selectable | Selectable | — |
| Chinrest | | | | | | |
| Vertical Movement | | 75 mm | 75 mm | 75 mm | 75 mm | 75 mm |
| Fixation Target | | LED: LED 3V 0.01A (Option) Halogen: Halogen 6.3V 0.14A (L0150V2) | LED: LED 3V 0.01A (Option) Halogen: Halogen 6.3V 0.14A (L0150V2) | LED: LED 3V 0.01A (Option) Halogen: Halogen 6.3V 0.14A (L0150V2) | LED: LED 3V 0.01A (Option) Halogen: Halogen 6.3V 0.14A (L0150V2) | LED: LED 3V 0.01A (Option) Halogen: Halogen 6.3V 0.14A (L0150V2) |
| Input Voltage | | AC100, 120V, 220V, 240V 50/60Hz | AC100, 120V, 220V, 240V 50/60Hz | AC100, 120V, 220V, 240V 50/60Hz | AC100, 120V, 220V, 240V 50/60Hz | AC100, 120V, 220V, 240V 50/60Hz |
| Power Consumption | | LED: 25VA Halogen: 65VA | LED: 25VA Halogen: 65VA | LED: 25VA Halogen: 65VA | LED: 25VA Halogen: 65VA | LED: 25VA Halogen: 80VA |
| Size & Weight (Without table top) | | | | | | |
| Weight | | 18.5 Kgs | 18.5 Kgs | 18.5 Kgs | 18.5 Kgs | 23 Kgs |
| Dimension | | LED: 550(W)x400(D)x660(H) mm Halogen: 550(W)x400(D)x690(H) mm | LED: 550(W)x400(D)x660(H) mm Halogen: 550(W)x400(D)x690(H) mm | LED: 550(W)x400(D)x660(H) mm Halogen: 550(W)x400(D)x690(H) mm | LED: 550(W)x400(D)x660(H) mm Halogen: 550(W)x400(D)x690(H) mm | LED: 550(W)x400(D)x660(H) mm Halogen: 550(W)x400(D)x690(H) mm |

Optional accessories

Compatibility

| Code | Description | L-0185 | | L-0187 | | L-0189 | | L-0240 | | L-0229-E | |
|------|---|----------|-------------------------|--------|-------------------------|--------|-------------------------|--------|-------------------------|----------|-------------------------|
| | | LED | Halogen | LED | Halogen | LED | Halogen | LED | Halogen | LED | Halogen |
| 1 | 136A-3080 Patient's hand grip | ○ | ● | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 2 | L-1-0100 Hruby Lens | ○ | ● | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 3 | OCL-002 Eyepiece 16 X | ○ | ● | | | | | | | | |
| 4 | L-5110 Applanation tonometer Swing arm type | ○ | ● | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 5 | L-5130 Applanation tonometer Plate type | ○ | ● | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 6 | YF-57 Built-in yellow filter | Equipped | | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 7 | L-0541 Beam splitter device | | | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 8 | L-0543 Camera adaptor with mount | | | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 9 | L-0568 CCD camera 480 TV lines | | | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 10 | L-0554 Video camera adaptor with C-mount (f=70mm) L-0564 Video camera adaptor with C-mount (f=50mm) | | | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 11 | L-0542 Observation tube Monocular | | | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 12 | L-0542-CB Assistant binocular microscope | | | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 13 | L-0541DC-1.3 Digital video camera beam splitter (1.3M) | | | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 14 | Z0023 External LED Background illumination | ○ | ● | ○ | ● | ○ | ● | ○ | ● | Equipped | |
| 15 | L-0541DC-FR Foot remote controller for L-0541DC-1.3 | ○ | ● | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 16 | L-0551 Digital SLR camera adaptor | | | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 17 | Z0070 Built-in C-mount unit with camera <small>*Please select digital camera (1.3M, w/filing software) or analogue CCD</small> | ○ | ● | | | | | | | | |
| 18 | Z0069 External LED fixation target | ○ | Equipped (Halogen bulb) | ○ | Equipped (Halogen bulb) | ○ | Equipped (Halogen bulb) | ○ | Equipped (Halogen bulb) | ○ | Equipped (Halogen bulb) |
| 19 | Z0026 180 degree inclinable binoculars adaptor | | | ○ | ● | ○ | ● | ○ | ● | ○ | ● |
| 20 | 136A-3652 Doctor's hand rest | ○ | ● | ○ | ● | ○ | ● | ○ | ● | ○ | ● |



Standard accessories

Focusing rod, Chin rest paper (100 sheets), Dust cover, Cap for focusing rod hole, Fuse, Light bulb, Breath shield, Gear rack cover, Hexagon wrench (2 sizes), Fixation lamp bulb (Halogen type slit lamp only), Cap for objective lens, Eyepiece rubber, Operation manual (English)

Designs and specifications are subject to change.

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