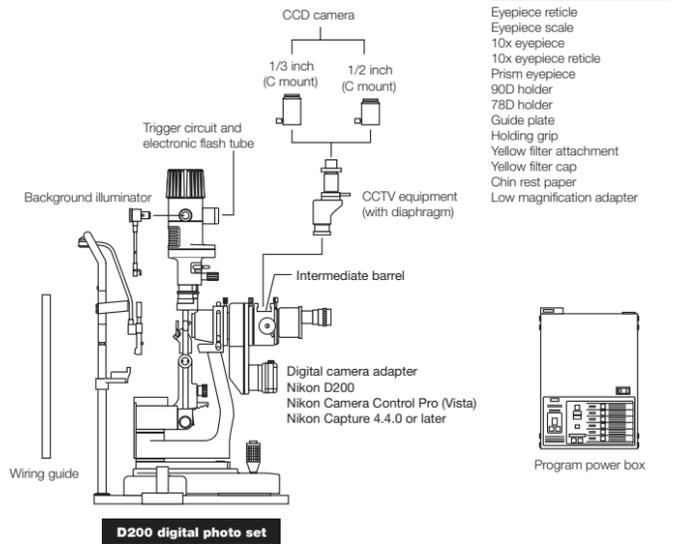


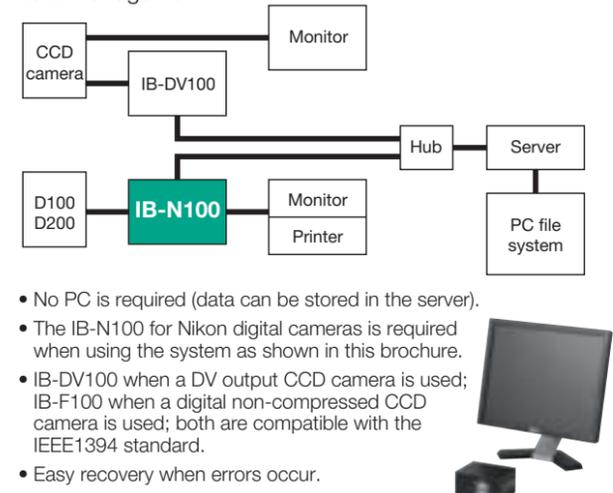
Zoom Slit Lamp RS-1000 Digital Photo Set

System Diagram

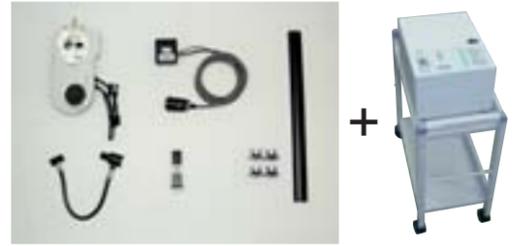


File System Diagram

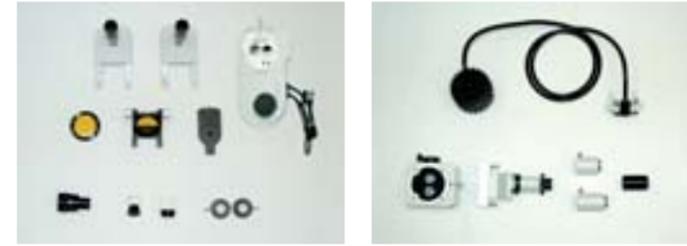
Using the general-purpose File System (optional) facilitates data management.



Digital Photo Set Standard Accessories



Optional Accessories



Digital Photo Zoom Slit Lamp RS-1000 Major Specifications

Microscope		
Type	Stereoscopic zoom microscope with parallel optics	
Objective magnification	0.6x to 2.58x (zoom ratio: 4.3)	
Conversion angle	13.2°	
Eye-piece magnification	12.5x (standard), 10x (option)	
Total magnification (with a 12.5x eyepiece)	Objective	Total
	0.6x	7.5x
	1.24x	15.6x
	2.58x	32.3x
Eye-piece diopter adjustment range	-5D to +5D	
PD adjustment range	55 to 75mm	
Illumination system		
Light source	12V-30W halogen lamp (pre-center)	
Slit projection magnification	1x	
Slit width	0 to 14mm continuously variable	
Slit rotation angle	90° to the right and left	
Slit length	φ 0.2, 1, 2, 5, 10, 14mm, 1 to 12mm continuously variable	
Slit vertical angle	0°, 5°, 10°, 15°, 20° from lower angle	
Filters	Heat absorbing, ND, green, and blue	
Halogen lamp voltage	5 to 11V, 12V (boost)	
Arm unit		
Rotation angle	90° to the right and left	

Cross slide table	
Horizontal movement	100 x 110mm (joystick operation)
Vertical movement	30mm (joystick rotation)
Control switches	Shutter switch (on top of joystick)
	Illumination adjustment knob (on the cross slide table)
	Boost switch (on the cross slide table)
Electrical specifications	
Input voltage	AC100V, 120V, 230V
Power consumption	1kW (max)
Dimensions	
Distance from table top to patient's eye	375mm
Working distance	100.4mm
Reaching distance (from eyepiece to patient's eye)	287mm (without photo equipment) 335mm (with D100 adapter)
Distance from table top to optical axis	339mm
Main body	330 (W) x 735(H) x 405(D)mm
Weight	
Main body	Approx. 13 kg
Power trans for illumination (P-200)	Approx. 1.6 kg (when used with the main body only)
Program power box	Approx. 10.3 kg

Usable camera backs

Nikon D100 and Nikon D200 (Available from RIGHT MFG.)



WARNING: To ensure correct usage, read all manuals carefully before using equipment

Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. © 2009 RIGHT MFG. CO., LTD. The information in this brochure is valid as of July 2009.

RIGHT MFG. CO., LTD.

Ophthalmic Sales
1-47-3, Maeno-cho, Itabashi-ku, Tokyo 174-8633, Japan
Tel: +81-3-3960-2275 Fax: +81-3-3960-2285
e-mail: eigyousitsu@rightmfg.co.jp

TOHOKU RIGHT MFG. CO., LTD.

Ophthalmic Service
45-1, Aza-yashikimae, Nakamura Osato-cho, Kurokawa-gun, Miyagi 981-3521, Japan
Tel: +81-22-359-3113 Fax: +81-22-359-3413



Printed in Japan (0907-02)T1



The Digital Photo Set RIGHTON RS-1000, a Zoom Photo Slit Lamp that Employs Inherited Optical Technology

Maximum of 10.2 mega-pixel high resolution digital images through the use of programmed flash illumination

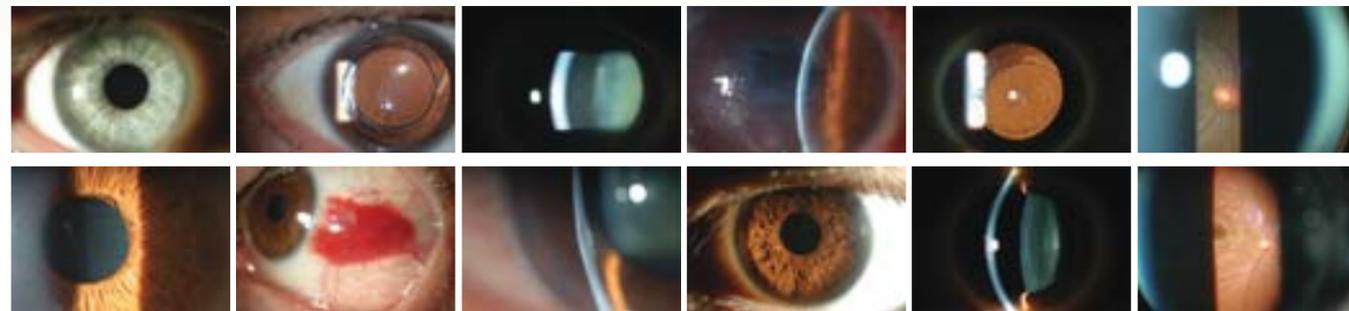
Both digital and CCD cameras mountable simultaneously on unit

Compatibility with Windows® Vista/XP operating system

The RS-1000 provides optimum images for diagnosis.

Features

- Traditional fine zoom optics
- Easy-to-select flash intensity thanks to the program power box
- Used in conjunction with Nikon digital SLR cameras, chosen for their excellent color tone, stability and dynamic ranges appropriate for medical photography as well as their high number of pixels.
- Extremely natural color reproduction
- Smooth, easy-to-use mechanics
- The Digital Photo Set is attachable to Nikon FS3 and Nikon FS3V (adapter and exchanging program power box required)



Program power box enables easily controlled flash output power

To obtain optimum exposure for each designated eye part, automatic exposure selection through the Program Auto Exposure function and manual setting in 10 steps (0 to 9) are possible. Once the shooting area has been determined, plus or minus exposure compensation enables the flash output power to be set according to the individual patient. Set the ISO sensitivity to 400 for dark eyes, and to 200 for light eyes. When the power box is switched to MANU, the exposure value set in the program will be transferred to manual setting.

Simply release the shutter to display and save data automatically

Press the button on the joystick to release the shutter and, within three seconds, the image appears automatically on the computer monitor. With the auto digital photo slit lamp system, image data can be saved automatically in the data file. Camera adjustment and computer operation during shooting is not required.



Manual setting Program setting Program power box

Total magnification covering 7.5x to 32.3x

With a standard 12.5x eyepiece, magnification ranges from 7.5x to 32.3x, enabling all detail to be observed continuously without vignetting.

With digital photography, a photo frame eyepiece can be attached to the unit to show the available shooting area, while the image can be displayed on the computer monitor.

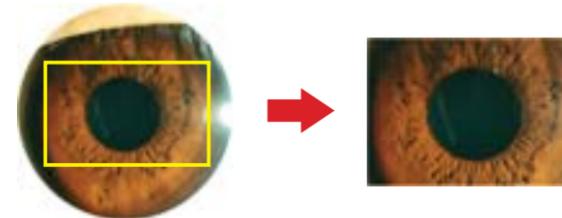


Photo frame eyepiece specifying available shooting area

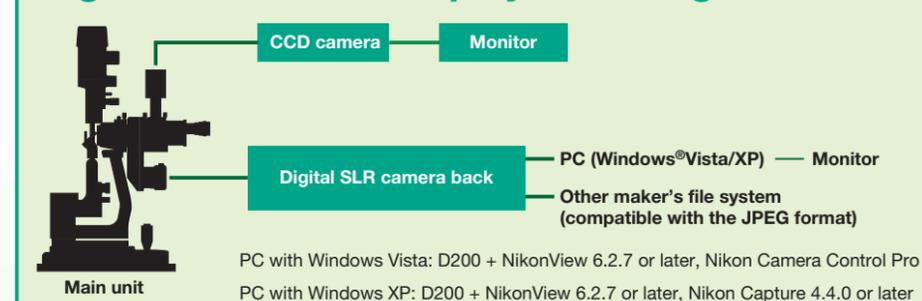
Lower magnification adapter (optional)

With a standard 10x eyepiece, magnification ranges from 6x to 25.8x, enabling the whole anterior area to be observed. The reproduction ratio varies from 0.8x to 3.44x.

Field of view ranges from 29.6 x 19.5mm, 6.9mm to 4.5mm. With a 10x photo frame eyepiece, the available shooting area extends to the area as shown in the rectangle (left), enabling the unseen areas to be covered.

Select either the standard magnification adapter or the lower magnification adapter.

Digital Photo Slit Lamp system diagram



D200 specifications

Image size:
10 million pixels (large)
5.63 million pixels (medium)

Image quality:
Fine 8bit 1/4 JPEG

Available number of exposures (at 7.5x):
4,000 (in normal mode, L size, PC with 10 GB memory)

Sharp and clear-cut slit lamp optics

The maximum slit length is ø14mm. Preset lengths of 0.2 to 14mm (6 steps) and continuously variable lengths of 1 to 12mm can be selected.

Convenient 78D and 90D holders (optional) for observing fundus and vitreous bodies

Bring the slit lamp to the infinity position to facilitate observation.

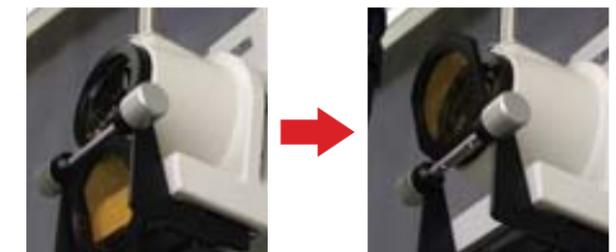


Boost illumination

The boost switch allows for scleral scatter or retro illumination observation methods.



Boost switch



Yellow filter attachment (optional barrier filter)
Fluorescence microscopy is possible with the built-in blue (exciter) filter.

Other sets available with the RS-1000

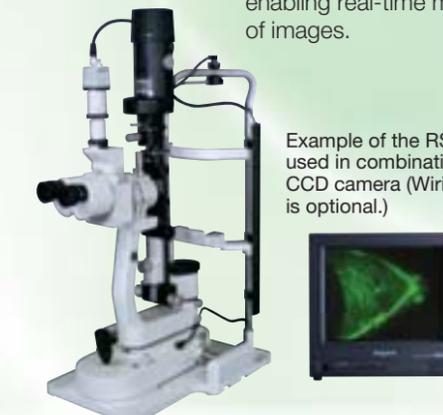
Clinical set



Example of clinical utilization (Patient holding grip is optional.)

CCD camera set

Images can be displayed on the monitor through the 1/2 and 1/3 inch C mount CCD camera, enabling real-time monitoring of images.



Example of the RS-1000 used in combination with CCD camera (Wiring guide is optional.)

Digital camera D200 + CCD camera set



Example of the RS-1000 used in combination with D200 + CCD cameras