



# ZOOM SLITLAMP MICROSCOPE

## MODEL SM-90N

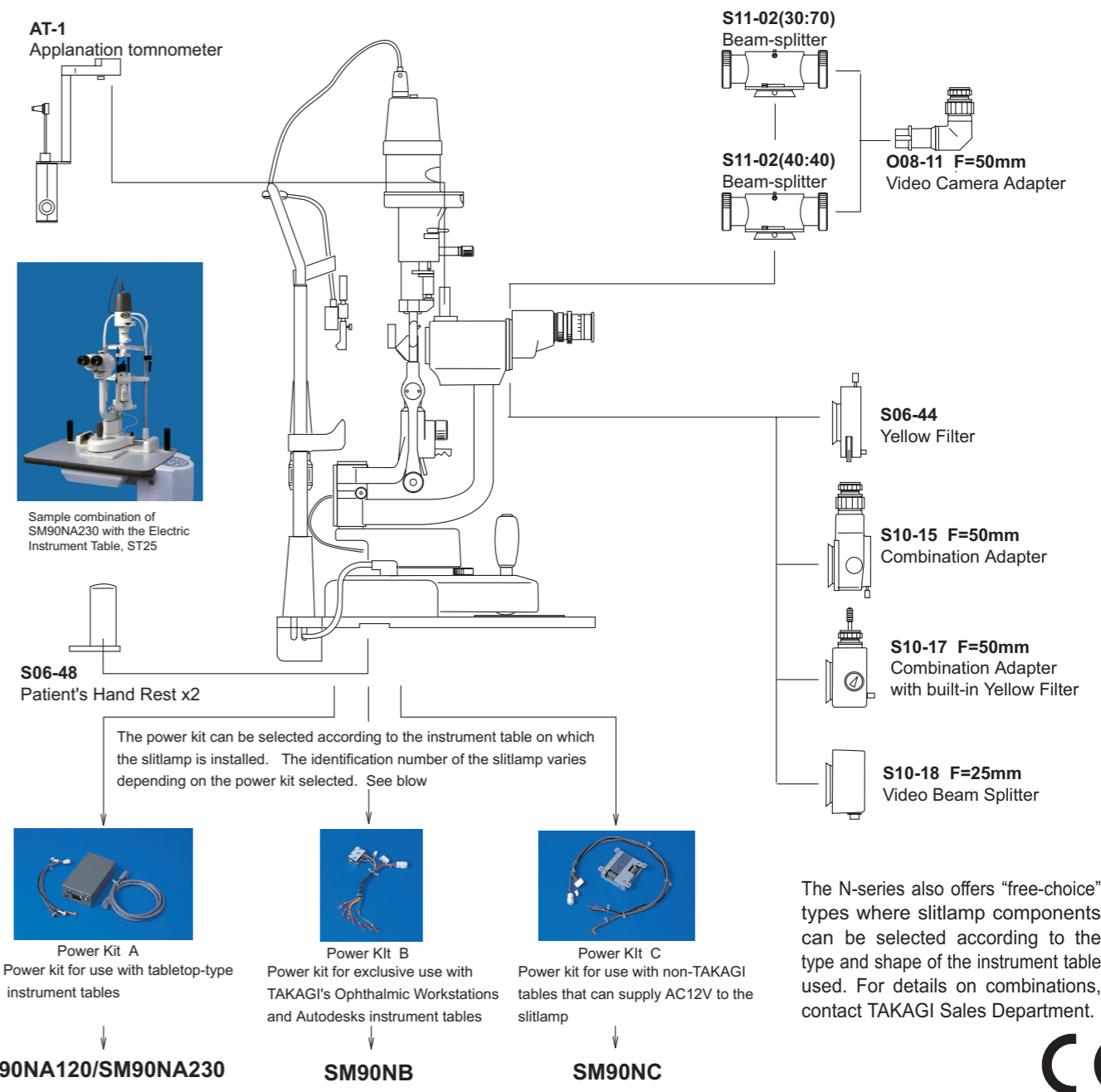


**Aiming at new levels in quality**

### N series Slitlamp lineup



### Optional components



The N-series also offers "free-choice" types where slitlamp components can be selected according to the type and shape of the instrument table used. For details on combinations, contact TAKAGI Sales Department.



●Design and specifications are subject to change as improvements are made to the product.

**TAKAGI SEIKO CO.,LTD.**  
330-2 IWAFFUNE, NAKANO-SHI, NAGANO-KEN, 383-8585, JAPAN  
TEL.+81-269-22-4512 FAX.+81-269-26-6321  
URL:<http://www.takagi-j.com> E-mail:[info@takagi-j.com](mailto:info@takagi-j.com)



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B05001 Rev.1 Printed in Japan. 4.2006 KY

# Incorporating motorized zoom system unique in its class **NEW SM-90N**



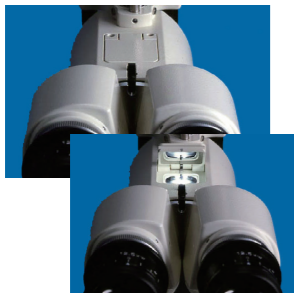
## High-resolution microscope with motorized zoom system

The TAKAGI slitlamp technology is combined with an electric zoom mechanism unique in its class. The zoom mechanism allows magnification to be changed over a range of 5.5x to 32x to provide optimum magnification in clinical applications. All lenses employed in the microscope are high-quality multi-coated for clear and bright images.



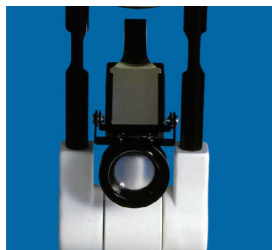
## Eyepiece with helicoid mechanism for diopter adjustment

The 12.5x high-eyepoint eyepieces with an expanded field of view enable observation over a wider area. With the diopter adjustment system that employs a helicoid mechanism, the diopter can be adjusted without rotating the lenses or the eye cap. This feature has been well received as it prevents the adjusted diopter from accidentally being changed during use as the eye caps will not rotate.



## Magnification display using one-touch flip-up mirror

The current magnification is displayed using the one-touch flip-up mirror, thus allowing photography at the fixed magnification when taking multiple images. Interior illumination of the display unit ensure that the magnification display is visible even in dark surrounding. Fitting the new combination adapter (S10-17) ensures that the magnification is displayed even when using an imaging system.



## Special mirror coating and diffuser

The mirror applying a special coating eliminates almost all ultra-violet and infrared lights to improve protection against phototoxicity for the examinee's retina. At the same time, natural images are obtained in the visible light spectrum, being improved in comparison with the UV filter (TAKAGI comparison). The use of the standard diffuser allows illumination over a wider range when photographing the anterior segment of the eye.

## Tonometer mount

The tonometer mount is fitted to the top of the microscope as standard, and fitting the TAKAGI applanation tonometer (AT-1) allows measurement of intraocular pressure.

## New form headrest

The new form headrest functions not as a headrest for the examinee but also as a support for the examiner holding an indirect lens upon fundus examination, reducing the fatigue in the arm caused by long hours of examination.



## Slitlamp with integrated base

By integrating it with the base, the sturdiness of the chin rest assembly has improved dramatically. Now that the base is integrated, there is no need to be selective with the sharp of fittings for the chin rest assembly or its installation method. The slitlamp can now be set up very easily on any type of instrument table.



## Right eye / Left eye recognition sensor and signal output function

The right eye/left eye recognition sensor is now built-in so that the slitlamp works well with an image filing system. Right eye/left eye recognition signal is output once the slitlamp is aligned to the eye to be tested.

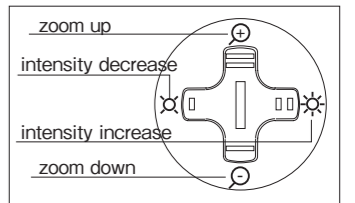
\* The cable-end connector of the connecting cable (optional) varies according to the image filing system used. Contact our Sales Department for details.

## Centralized control system

In addition to the ability to move the slitlamp, and 3D movement in the X,Y, and Z directions by joystick the provision of a trigger button (also functions as the light boost button) at the top, and connection to video equipment allows the examiner to acquire excellent images while looking through the slitlamp.

The newly developed X-Y control button fitted for the first time to the slitlamp allows the zoom up-down and the intensity increase and decrease to be controlled with one hand. The X-Y control button may be rotated 90 degrees, thus allowing the examiner to change the direction as necessary.

\* Light boost and trigger functions do not work simultaneously



## Navigation LED's

The LED's illuminate to indicate the approximate position to assist focusing on the eye to be tested. By aligning the marker located on the base of the slitlamp to the position of the relevant LED, the microscope can easily be focused on the right or left eye.

\* The focal length between the microscope and the eye to be tested varies from individual to individual. This function only provides approximate positioning.



## Key Specifications

### MICROSCOPE

Type	Galilean-type covering binocular microscope
Magnification Changer	motorized zoom
Eyepieces	12.5x wide
Total magnifications	5.5x to 32x
Real field of view	40.9mm to 6.8mm dia.
Interpupillary adjustment	52mm to 85mm
Diopter adjustment range	-5 diopter to +5 diopter

### CROSS-SLIDE BASE

Longitudinal (coarse) movement	90mm
lateral (coarse) movement	110mm
Horizontal (fine) movement	15mm
Vertical movement	±15mm

### CHIN REST

Vertical movement	70mm
Fixation light	LED (red)

### SLITLAMP

Slit width	0 to 10mm, continuously variable (at 10mm, slit becomes a circle)
Slit length	1 to 10mm, continuously variable
Aperture diaphragms	10mm, 5mm, 3mm, 2mm, 1mm, 0.2mm dia.
Filters	Heat absorbing, UV, red-free, and cobalt blue
Lamp	12V 30W halogen bulb

### POWER SUPPLY

Input voltage	100VAC to 230VAC
	50/60Hz
Maximum power consumption	64VA

### DIMENSIONS & WEIGHT

Base dimensions	359mm(W) x364mm(D)
Weight	13.5kg