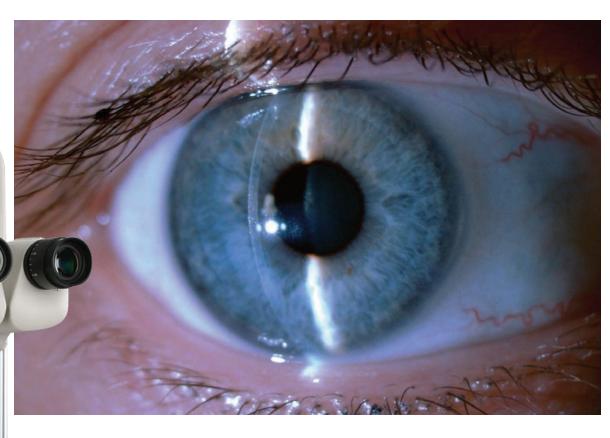
## **SL-D Series**

The most versatile digital slit lamps



- » Outstanding Optical Quality
- » Comfort of Use
- » Precision Mechanism
- » Smooth Movement
- » Digital Ready



### Special Features

With many features that enhance observation, clinical use and digital documentation capability, the "D" Series of Topcon Slit Lamps is the ideal choice for the demanding eye care professional.



**OPTICS** - Topcon is one of the world leaders in lens making. This means that Topcon manufactures its own lenses to outfit its optical instruments, providing uncompromised quality and optical excellence. Topcon's specially treated lenses achieve a significant improvement in light transmission for a bright, clear and distortion-free view.

**DESIGN** - Topcon Slit Lamps are ergonomically designed with the eye care professional and the patient in mind. Easy accessibility and a streamlined body make them user and patient friendly. The SL "D" Series employs 12.5x hi-eyepoint eyepieces and Topcon's original converging binocular tubes with a comfortable parallel magnification for sharp stereoscopic observation.



**PRECISION** - The Topcon original "Elite" mechanism with silky-smooth movement for elevation and cross plate sliding assures exact positioning of the instrument providing total control. Slit angle rotation from 0 to 180 degrees and slit decentration capability increases the flexibility of use.

## SL-D Slit Lamp Models

#### SL-D2

A cost effective instrument that doesn't compromise on features and delivery.

- » Convergent / parallel optics for comfortable view
- » 3 magnification drum changer for quick selection of 10x, 16x and 25x
- » Omni directional joystick
- » Adjustable illumination level by rheostat
- » Built-in Amber filter, inserted and removed by rotary action, for color enhancement
- » Built-in Cobalt Blue and Red-free filters
- » Continuous adjustable slit to a maximum of 14mm in height and width
- » Digital Ready with joystick activated capture for DC-3 Camera Attachment
- Accepts models 900 and 870 Applanation Tonometers with optional mount





#### SL-D4

A complete Slit Lamp with an expanded magnification range covering all aspects of the eye examination.

- » Convergent / parallel optics
- Parallel drum magnification changer with 6x, 10x, 16x, 25x and 40x. The 40x magnification level is especially useful in corneal endothelial observation.
- » Built-in Amber filter, inserted and removed by rotary action, for color enhancement
- Cobalt Blue and Red-free built-in filters
- » Continuous rheostat-controlled illumination at the user's fingertips
- Continuous adjustable slit to a maximum of 14mm in height and width
- » Digital Ready for DC-3 Camera Attachment with joystick activated capture
- » Accepts models 900 and 870 Applanation Tonometers with optional mount

## SL-D Slit Lamp Models

#### SL-D7

For those preferring a tower illumination system with a wide array of features, including the optional Topcon "through-the-slit" flash attachment for digital capture, the SL-D7 is the instrument of choice.

- » Converging / parallel optics
- 5-magnification drum changer: 6x, 10x, 16x, 25x and 40x, (useful in endothelium cell observation)
- » 20° Slit Beam Tilt for gonioscopy observation
- » Slit decentration capability
- » Versatile slit adjustment, continuous or pre-set up to 14mm of width and height
- » 5 built-in filters: Amber, Cobalt Blue, Red-free, 13% Neutral Density and Heat Absorbent
- » Rotating slit angle from 0 to 180 degrees with horizontal scanning capability
- » Tonometer mount included for R900 model
- » Digital Ready, accepting the DC-3 Camera Attachment, the Topcon Digital Photo Attachment and the FD-21 Flash Device



#### SL-D8Z

Enhanced versatility and ease of use in a tower model with continuous zoom magnification. Includes a variety of features and can be combined with optional accessories like the Topcon "through-the-slit" flash attachment for digital capture.

- Continuous zoom magnification from 6x to 32x with click stops at changer: 10x, 16x and 25x
- Converging / parallel optics
- » 20° Slit Beam Tilt for gonioscopy observation
- » Slit decentration capability
- » Versatile slit adjustment, continuous or pre-set up to 14mm of width and height
- 5 built-in filters: Amber, Cobalt Blue, Red-free, 13% Neutral Density and Heat Absorbent
- » Rotating slit angle from 0 to 180 degrees with horizontal scanning capability
- » Tonometer mount included for R900 model
- » Digital Ready, accepting the DC-3 Camera Attachment, the Topcon Digital Photo Attachment and the FD-21 Flash Device

## Digital Imaging

#### **High Quality Digital Images**

#### Digital Camera DC-3 (Optional Accessory)

The DC-3 Digital Camera is built exclusively for the SL-D Series to provide easy digital documentation. A variety of capture modes can be used, including still or video imaging. The DC-3 integrates a beam splitter for internal light transmission and an eight megapixel digital camera in one unobtrusive and compact unit. The images captured by the DC-3 can be quickly downloaded into any PC imaging software via a USB cable. For more efficient patient database management, all Topcon Digital Slit Lamps can be connected with the Topcon IMAGEnet® Digital Imaging Systems.

- » Compact and user friendly design
- » Easy capture by joystick button
- » 8 megapixels of resolution
- » Still images and video recording capability
- » Low illumination requirement for patient comfort





#### Digital Photo Attachment (Optional Accessory)

The Topcon Digital Photo Attachment is specially designed for the SL-D7 and SL-D8Z models to allow various DSC/CCD cameras to be used with the Topcon FD-21 Flash Device. The entire illumination for image capturing is produced by a flash tube with very short exposure time that provides steady images and accurate color balance and details. The flash illumination goes through the slit as well as through the background illumination system for balanced results in slit photography.

The Topcon Digital Photo Attachment accepts a variety of cameras such as:

- » Topcon Digital Camera DC-3
- » Nikon SRL Digital Camera

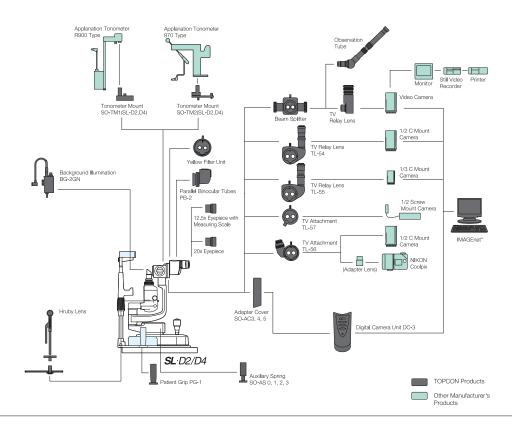
#### **IMAGEnet Systems (Optional Accessory)**

All Topcon SL "D" Series Slit Lamps can transfer images to IMAGEnet for versatile diagnostic processing and interpretation. IMAGEnet is a full function digital imaging system for faster, more efficient acquisition, storage, retrieval and analysis of all types of ophthalmic images. The images captured can be used in research, education and clinical applications.

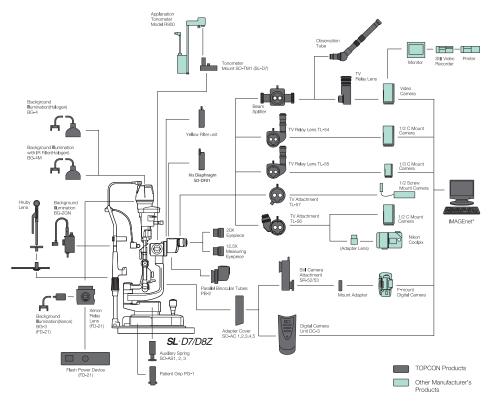


# System Configurations

### SL-D2/D4



### SL-D7/D8Z



## Optional Accessories



Background Illumination BG-2GN



Patient Grip PG-1



TV Relay Lens



Background Illumination BG-4



Observation Tube



Yellow Filter Unit





### **EyeRoute Synergy®**

All Topcon "D" Series Slit Lamps can transfer images from IMAGEnet to the EyeRoute Synergy Ophthalmic Image Management System. EyeRoute Synergy integrates images and reports from Topcon and over 100 other manufacturers' instruments into a single and secure digital environment. EyeRoute Synergy can be interfaced with most electronic medical records (EMR) software and allows viewing, comparing, annotating and transmitting patient images seamlessly. Its scalable configuration permits expanding the system according to the user's needs.

# Specifications

#### **SL-D Series**

Microscope	SL-D2	SL-D4	SL-D7	SL-D8Z
Туре	Galilean magnification changer with converging binocular tubes			
Magnification Selection	3 steps by drum rotation	5 steps by dr	rum rotation	Variable via continuous zoom (click 10X, 16X, 25X)
Eyepiece	12.5x			
Magnification Ratio (Field of View)	10x (22.5 mm) 16x (14.1 mm) 25x (8.8 mm)	6x (35. 10x (22 16x (14 25x (8. 40x (5.	.5 mm) .1 mm) 8 mm)	Continuous from 6X - 32X (35.2 mm - 7 mm)
Slit Illumination				
Slit Width	Continuous from 14 mm to 0 mm (at 14 mm, slit becomes a circle)			
Slit Length	Continuous from 14 mm to 0 mm (at 14 mm, slit becomes a circle)			
Slit Angle	0 to 180 degrees with horizontal scanning capability			
Filters	Blue, Red-Free, Amber UV Cut (Normal Use), IR Cut (Normal Use)		Blue, Red-Free, Amber UV Cut (Normal Use), IR Cut (Normal Use) ND (13% Transmission), Heat Insulation Exciter/Barrier (Factory Option)	
Illumination Lamp	6V, 20W halogen lamp		12V, 30W halogen lamp	
Base				
Longitudinal Movement	90 mm			
Lateral Movement	100 mm			
Fine Base Movement	15 mm			
Vertical Movement	30 mm			
Chinrest				
Vertical Movement	80 mm			
Fixation Target	Red-LED		Red-LED or White-Bulb	
Power				
Input (Primary)	100-120V, 220-240V, AC			
Frequency	50/60 Hz			
Power Consumption	160VA			
Dimensions				
with Table	550 mm x 399 mm x 558 mm		550 mm x 399 mm x 760-790 mm	
with Unit Table	440 mm x 379 mm x 558 mm		440 mm x 399 mm x 760-790 mm	
without Table and Chinrest	329 mm x 306 mm x 415-445 mm		329 mm x 306 mm x 652-682 mm	
Weight				
with Table	17 kg		19 kg	19.5 kg
with Unit Table	16 kg		18 kg	18.5 kg
without Table and Chinrest	9.6 kg		11.5 kg	12 kg

#### DC-3 (Optional Accessory)

System	Light path diverted by beam splitter			
Beam Splitter Distribution Ratio	50% light to operator, 50% light to camera			
Image Magnification	Displayed Magnification	Picture Magnification	Picture Field	
(with SL-D7)	6	0.17	31.8 x 42.3 mm	
	10	0.27	20.4 x 27.2 mm	
	16	0.43	12.7 x 17.0 mm	
	25	0.69	7.97 x 10.6 mm	
	40	01.07	5.10 x 6.81 mm	

Working Distance	45.50 mm	
Image Capturing Device	1/1.8 type CCD; Effective pixel number: 8.13 million pixels	
Power	Input DC12V <u>+</u> 0.5 V 1A	
Dimensions	225 mm (H) x 71 mm (W) x 70 mm (D)	
Weight	0.64 kg	

DC-3 can be used only with SL-"D" Series lamps: SL-D2/D4/D7/D8Z

