



**NEW**  
**SL-D Series**  
DIGITAL SLIT LAMP

# *Unsurpassed Optical Quality in The First "True" Digital Slit*

## *Ready for Digital Imaging*

- The Topcon SL-D Series is the first "true" digital slit lamp series that combines high optical performance with versatile digital capability. The SL-D Series incorporates excellent optics that assure optimal visualization of all structures of the eye. The instruments also incorporate unique filters to further enhance their clinical efficiency. The concept of the "true" digital slit lamp is based on the extensive range of optional digital capture devices that can be mounted on these outstanding clinical instruments. Paramount among these is the dedicated DC-1 Digital Camera that provides easy-to-capture, high quality digital images. To further advance their "digital-ready" attractiveness, an auto left/right eye detection function is incorporated into the slit lamps. These premier diagnostic instruments offer superior clinical performance with unmatched digital capability.



# Slit Lamp

## Lamp Series

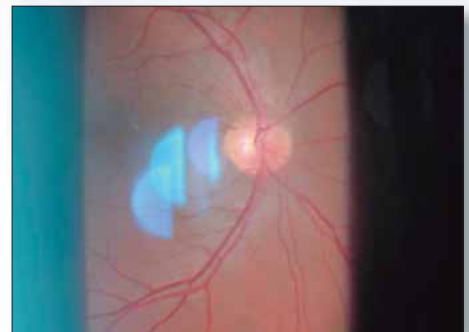
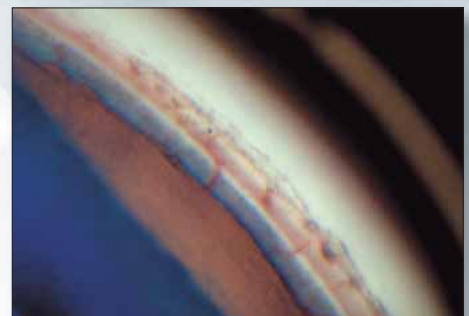
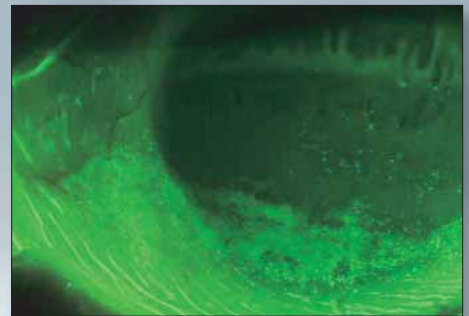
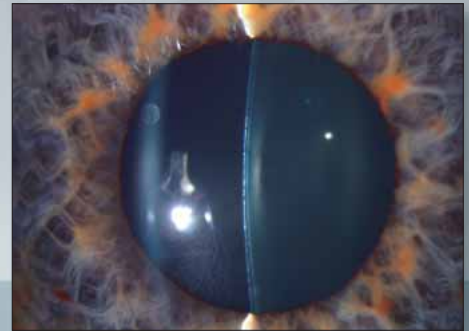


Digital Camera  
**DC-1**  
(Optional Accessory)



The DC-1 Digital Camera is built exclusively for the SL-D Series to provide superb digital documentation. A variety of image capture modes can be taken including still or video images. The DC-1 integrates the beam splitter, PC card storage and the high-resolution digital camera into one unobtrusive and compact system. The images captured by the DC-1 can be quickly downloaded to any PC imaging software package from a compact flash card or be directly transmitted via a USB cable. For more efficient patient database management, all of the SL-D Digital Slit Lamps can be connected to Topcon's IMAGEnet™ Imaging Systems.

- *Easy-capture with joystick button on slit lamp*
- *Still images and digital video recording*
- *2X and 4X zoom function*
- *Download JPEG images via compact flash card or USB cable*
- *Compact and user-friendly design*
- *Low-flash requirement for patient comfort*
- *Multi language menu selection*



SL-D S

# Digital Slit Lamp



### *Photo Attachment*

#### *SL-D7 and SL-D8Z Models (Optional Accessory)*

The Topcon Photographic Attachment is specially designed for the SL-D7 and SL-D8Z to allow various DSC/CCD cameras to be used with the unique FD-21 Flash Device. The entire illumination used for image capturing is produced by a high-intensity flash tube with very short exposure time to provide superb images and additional details. Superior clarity, color-balance, resolution and depth-of-field, assist in accurate examinations. The Photographic Attachment accepts and supports an extensive range of DSC/CCD cameras, such as:

- Topcon Digital Camera DC-1
- F-mount Digital Camera Back
- Sony CCD Camera DXC-990P/390P
- Other 1/2" and 1/3" Mount CCD Cameras



Flash Device FD-21

### *IMAGEnet™ Systems (Option)*

The Topcon SL-D Series is capable of inputting images and data into the Topcon IMAGEnet™ family of software products for versatile diagnostic processing and interpretation. The digital images generated can be captured for use in research, education, and clinical applications. IMAGEnet™ 2000 is a full-function, state-of-the-art digital imaging system for faster, more efficient acquisition, storage, retrieval and analysis of all types of ophthalmic images.

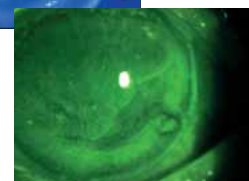


### *Fluorescein Observation of the Anterior Segment*

#### *SL-D7 and SL-D8Z Models (Factory Option)*

When requested at the time of order, a special combination of optional filters can be incorporate to provide the eye care specialist with excellent fluorescein images of the anterior segment.

These efficient filters aid the practitioner in detecting abnormalities of the corneal and conjunctival epithelium while permitting the use of lower levels of light intensity for greater patient comfort.



### *Amber Filter*

The SL-D Series incorporates an amber filter, which can be easily inserted or removed and improves the contrast and color depth of the images.



Amber

No Amber

## SL-D SERIES LINE-UP



*A complete range of digital-ready slit lamps is available including the SL-D7/D8Z photographic slit lamps, the SL-D Series*

*All SL-D Digital Slit Lamps allow the DC-1 Digital Imaging System for digital imaging. The SL-D Series employs 12.5x hi-eyepoint eyepieces for comfortable observation. A wide assortment of optional accessories is available.*

### **SL-D2**

#### *Three Magnification Digital Slit Lamp*

The SL-D2 incorporates a parallel drum magnification changer that allows for quick and easy selection among three convenient magnifications of 10X, 16X and 25X. The SL-D2 offers the most cost-effective digital imaging solution with optimal clarity, color resolution and depth-of-field.



\*Unit Model

### **SL-D7**

#### *Five Magnification Digital Slit Lamp*

The SL-D7 incorporates a parallel drum magnification changer that allows for quick selection among five convenient magnifications of 6X, 10X, 16X, 25X and 40X. When the optional FD-21 Flash Device is incorporated, the SL-D7 converts to a 'true' digital photographic slit lamp providing exceptional images of the cornea, endothelium and fundus to enhance accurate documentation.



\*Table Model

*available to meet the clinical needs of every eye-care specialist. From the versatile SL-D2/D4 to the premier provides unprecedented image clarity, color fidelity, image definition and light transmission.*

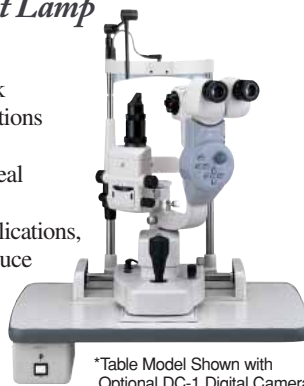
*Camera to be easily attached at any time and all models incorporate a new amber filter for clear and high-contrast fundus observation. and Topcon's converging binocular tubes with a parallel magnification body for remarkably sharp and comfortable stereoscopic further expands the clinical efficiencies of the 'D' series.*

## SL-D4

### Five Magnification Digital Slit Lamp

The SL-D4 incorporates a parallel drum magnification changer that allows for quick selection among five convenient magnifications of 6X, 10X, 16X, 25X and 40X. The 40X magnification is especially useful for Corneal Endothelium observation.

Encompassing a variety of ophthalmic applications, the demanding eye care specialist can produce excellent images of both the anterior and posterior structures of the eye.



\*Table Model Shown with  
Optional DC-1 Digital Camera

## SL-D8Z

### Zoom Magnification Digital Slit Lamp

The SL-D8Z offers a zoom magnification changer, which provides continuous observation through the magnification range of 6X to 32X.

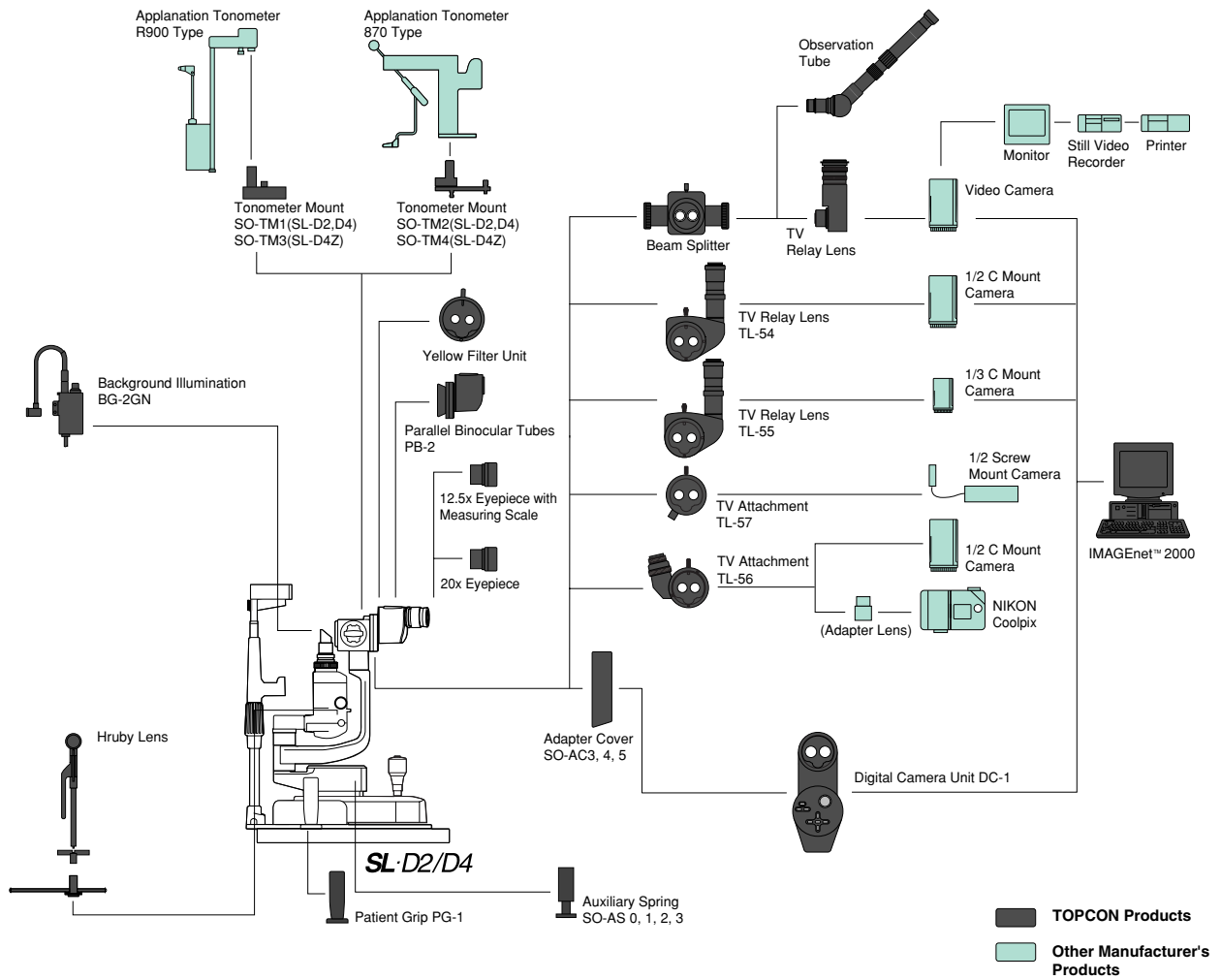


\*Table Model Shown with  
Optional F-mount Digital Camera Back

The highly efficient zoom optics allow for extraordinary visualization of minute anterior segment conditions. When the optional FD-21 Flash Device is incorporated, the SL-D8Z becomes the premier zoom photographic slit lamp for unparalleled digital documentation.

# SL-D SERIES ACCESSORIES

## SYSTEM CONFIGURATION (SL-D2/D4)



## OPTIONAL ACCESSORIES



Background Illumination **BG-2GN**

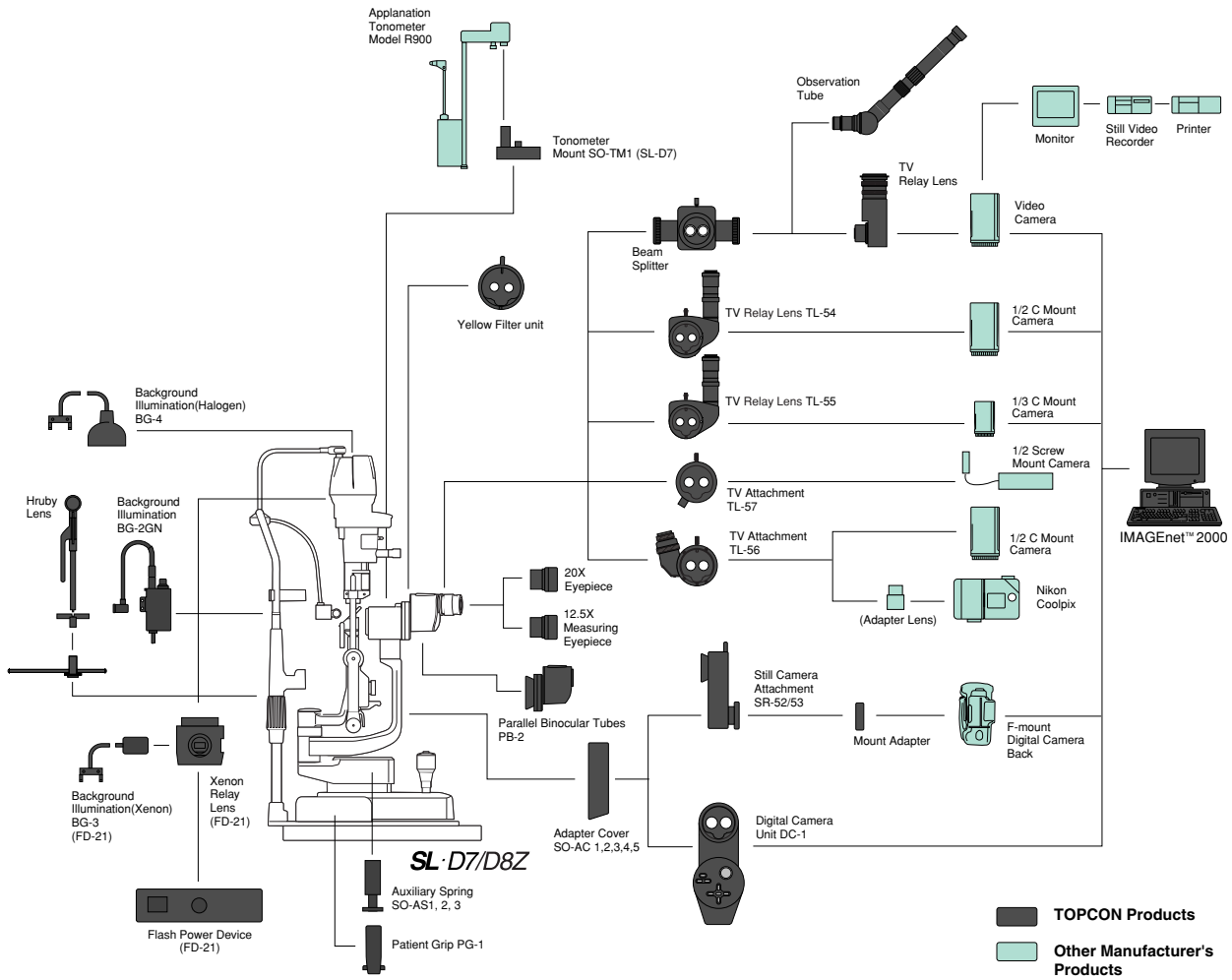


Patient Grip **PG-1**



TV Relay Lens **TL-55**

## SYSTEM CONFIGURATION (SL-D7/D8Z)



Background Illumination **BG-4**



Observation Tube



Yellow Filter Unit

# SL-D SERIES SPECIFICATIONS

## SPECIFICATION FOR SL-D SERIES

Microscope	SL-D2	SL-D4	SL-D7
Type	Galilean magnification changer with converging binocular tubes		
Magnification Selection	3 steps by drum rotation	5 steps by drum rotation	5 steps by drum rotation
Eyepiece	12.5x		
Magnification Ratio (Field of View)	10x (22.5mm) 16x (14.1mm) 25x (8.8mm)	6x (35.1mm) 10x (22.5mm) 16x (14.1mm) 25x (8.8mm) 40x (5.6mm)	6x (35.1mm) 10x (22.5mm) 16x (14.1mm) 25x (8.8mm) 40x (5.6mm)
Slit Illumination			
Slit Width	Continuous from 14mm to 0mm (at 14mm, slit becomes a circle)		
Slit Length	Continuous from 14mm to 1mm (at 14mm, slit becomes a circle)		
Slit Angle	0 to 180 degree with horizontal scanning capability		
Filters	Blue, Red-Free, Amber UV Cut (Normal Use), IR Cut (Normal Use)	Blue, Red-Free UV Cut (Normal Use), ND (13% Transmittance) Exciter / Barrier (Normal Use)	
Illumination Lamp	6V , 20W halogen lamp		12V , 30W halogen lamp
Base			
Longitudinal Movement	90mm		
Lateral Movement	100mm		
Fine Base Movement	15mm		
Vertical Movement	30mm		
Chinrest			
Vertical Movement	80mm		
Fixation Target	Red-LED		Red-LED or other
Power			
Input (Primary)	100-120V, 220-240V AC		
Frequency	50/60Hz		
Power Consumption	160VA		
Dimensions			
w/ Table	550mm x 399mm x 558mm		550mm x 399mm x 558mm
w/ Unit Table	440mm x 379mm x 558mm		440mm x 399mm x 558mm
w/o Table and Chinrest	329mm x 306mm x 415-445mm		329mm x 306mm x 415-445mm
Weight			
w/ Table	17kg		19kg
w/ Unit Table	16kg		18kg
w/o Table and Chinrest	9.5kg		11.5kg

<b>SL-D8Z</b>
Variable via continuous zoom (Click 10X, 16X, 25X)
Continuous from 6X~32X (35.2mm~7mm)
ee, Amber IR Cut (Normal Use) (n), Heat Insulation Factory Option)
logen lamp
White-Bulb
x 760-790mm
x 760-790mm
x 652-682mm
19.5kg
18.5kg
12kg

## SPECIFICATION FOR DC-1 (Optional Accessory)

<b>Image Quality of CCD</b>	3.24 million pixel images
<b>Exposure Mode</b>	Auto/Manual (Shutter Speed 1-1/1000s)
<b>Sensitivity</b>	Auto/ISO 100/200/400/800 (Equivalent to ISO)
<b>Resolution</b>	2048x1536 (Fuji size) 1024x768,640x480
<b>File Type &amp; Image Compression</b>	Bitmap/TIFF/YUV JPEG (1/8,1/16,1/32)
<b>File Format</b>	DPOF Compliant (Name of File/Date/Time/Index) Exif 2.1 Compliant
<b>Movie Image</b>	Motion JPEG QVGA (15fps) Maximum 60s
<b>Digital Zoom</b>	1x, 2x,4x (not for movie image)
<b>Video Out</b>	NTSC/PAL
<b>Interface</b>	USB2.0, Output the signal of external trigger, R/L auto detection
<b>Recording</b>	Compact Flash™ Card (Type I/II Maximum 512MB) Microdrive™ Maximum 512MB
<b>PC Interface</b>	TWAIN/Mass Storage Class
<b>Dimensions</b>	224(H)x90(W)x82(D)mm
<b>Weight</b>	0.92kg
<b>Power Source</b>	DC 12V
<b>Power Consumption</b>	12W

\*Subject to change in design and/or specifications without advanced notice.

**IMPORTANT**

In order to obtain the best results with these instruments, please be sure to review all user instructions prior to operation.

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