



All-in-One Digital Camera System
Digital Sight
DS-5M-L1



Making it easier to capture and share high resolution true-to-life images

Stand Alone Design

Stand alone design allows independent operation for greater productivity and ease of use, while still allowing connection to PCs via a LAN network and external monitors.

High-resolution 5-megapixel Images

Equipped with a 5-mega pixel color matrix CCD. Captures high-definition images at 2560 x 1920 effective pixels. Built-in image processing capabilities such as shading correction and tone settings are specifically engineered for photomicrography applications. Since DS-5M-L1 automatically calculates the optimum shading correction value to best suit your microscope, you can easily recall and apply the value with click operation.

Pre-programmed Optimum Imaging Modes

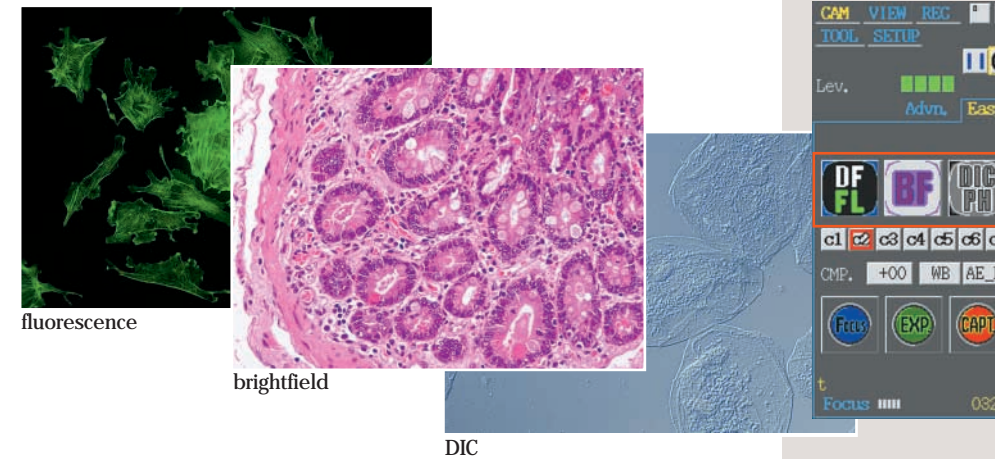
Exclusive scene function utilizes a pre-programmed mode to provide optimum photography for each observation method. No need to go through troublesome camera setting procedures for every photo session. Just select the observation method by clicking the scene button with the mouse.

Large 6.3-inch LCD Monitor

Even without an external monitor, the large-screen, 6.3-inch LCD monitor built into the minimum-footprint camera control unit offers excellent resolution for fast and accurate focusing as well as observation.



Digital Sight DS-5M-L1



Scene function for one-click optimum photography

Based on Nikon's experience with the manufacture of microscopes, optimal pre-programmed imaging modes are provided in the Menu, so the appropriate condition can be selected according to the observation method (brightfield, fluorescence and DIC/phase contrast). The best image can be captured with a simple click. The user's own settings can also be registered in 7 modes as custom settings.

Count marking function

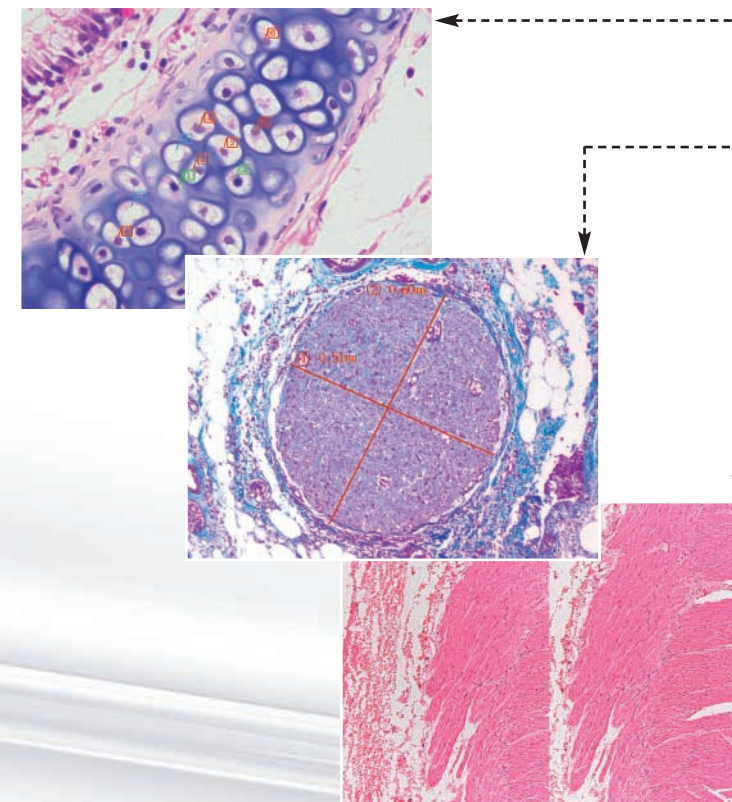
Up to 99 serial numbers can be marked to provide a convenient way to confirm the number of notes on-screen, and can also be easily saved and printed.

Distance measurement between two points

Easily measures the distance between any two points that the user specifies (not available during digital zoom).

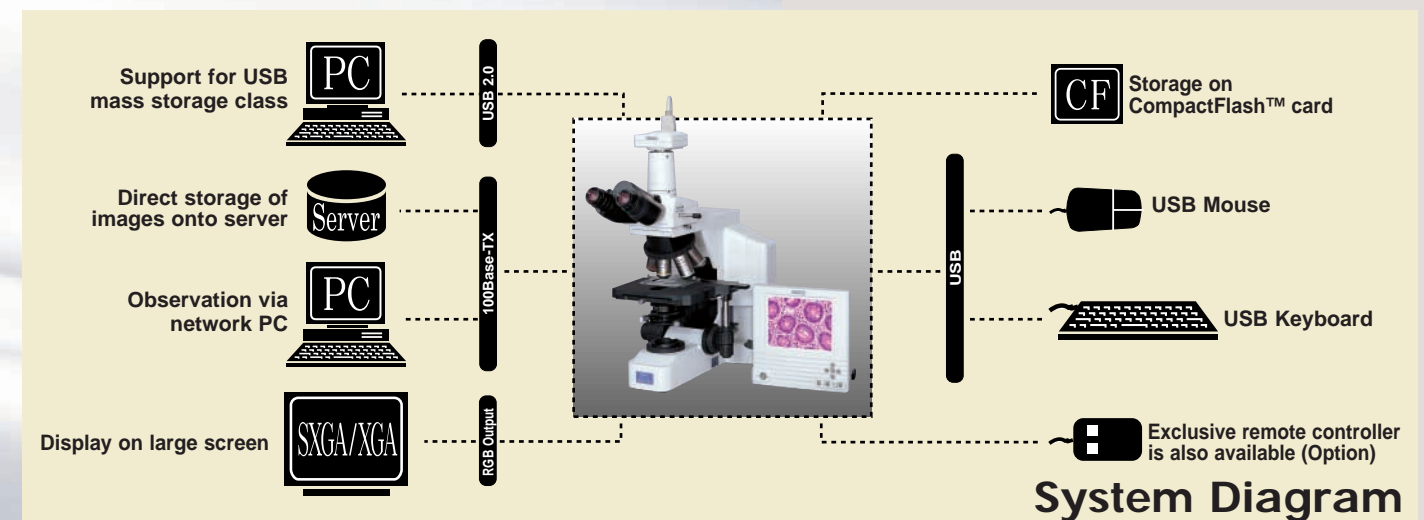
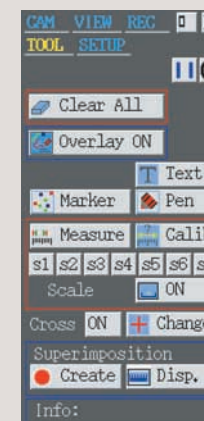
2-screen split display

A frozen image can be displayed alongside the live image to compare the two.



Wide variety of other tools

- **Text and pen input:** The user can input any character on the screen by mouse or via a USB-connected keyboard. Also, lines and figures can be drawn in freehand using the pen tool.
- **Thumbnail display:** Images stored on CompactFlash™ card can be displayed together on the screen. Filenames and photographic information can also be displayed.
- **Superimpose function:** Saved images can be superimposed over the live image, for easy comparison.
- **Cross line display**
- **Scale display**



System Diagram

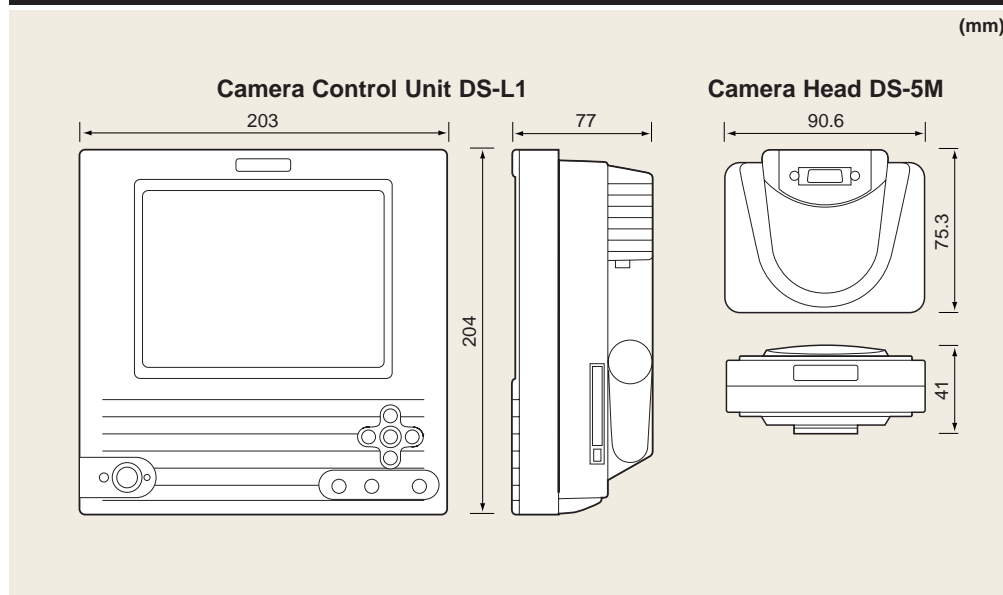
Digital Sight DS-5M-L1

Specifications

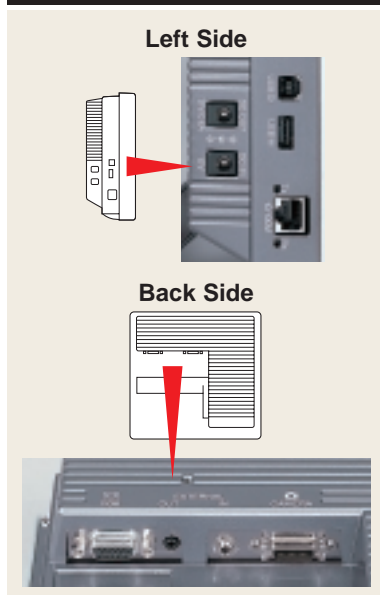
CCD	2/3-in. high density CCD; total number of pixels: 5.24 million (effective 5.07 million)
Sensitivity	2400 lx, F5.6 or greater; equivalent to ISO 260
A/D conversion	12-bit
Lens mount	C-mount
Exposure control	Program AE, Shutter-priority AE, Focus AE, manual, with AE lock function
Exposure time	1/1000 to 60 sec.
Digital zoom	Up to 16X (8 steps)
Interval shooting	10 sec. - 6 hr. intervals
Exposure metering	Average metering, Peak hold metering
Exposure metering range	3 selectable sizes
Compensation	White balance, Gamma compensation (9 types), Shading compensation (Auto: 5-step, Custom setting: 2 types)
Color effects	Color/monochrome, Color enhancement, Hue rotation, Black level adjustment
Image rotation	Vertical and horizontal rotation
LCD monitor	6.3-in. TFT color LCD XGA (1024x768, 60Hz)
External monitor output	Analog RGB: SXGA (1280x1024, 60Hz), XGA (1024x768, 60Hz)

Live display mode	5M interlace mode (3.75 frames/sec. max.) 1.3M progressive mode (7.5 frames/sec. max.) 1.3M interlace mode (6.8 frames/sec. max.) Center scan mode (15 frames/sec. max. displays 1/2 in center of V direction)
Image size	2560x1920 pixels, 1280x960 pixels, 640x480 pixels
Storage format	BMP, JPEG (4-step compression)
Storage media	CompactFlash card (Type I, Type II)
Networking	Ethernet (10/100 Base-TX), DHCP compatible, HTTP, Telnet or FTP server, FTP client
Interface	USB1.1 host port (USB mouse, USB keyboard connection), USB1.1/2.0 device port (Mass Storage Class support)
Power supply	AC100-240V, 50/60Hz
Power consumption	138VA
Weight	Camera head: approx. 230g, CCU: approx. 1300g, AC adapter: approx. 350g
Operating environment	0-40°C, 85%RH max. (without condensation)
System composition	Camera head DS-5M, CCU DS-L1, Camera cable (3m), AC adapter, power cord
Optional accessories	Exclusive remote control unit, 0.7x Relay lens (C-mount)

Dimensions



Interface



Company and product names included in this brochure are the registered trademarks of respective companies. Screen images in this brochure are simulated. Specifications and equipment are subject to change without any notice or obligation on the part of the manufacturer. April 2003. ©2003 NIKON CORPORATION

WARNING TO ENSURE CORRECT USAGE, READ THE CORRESPONDING MANUALS CAREFULLY BEFORE USING YOUR EQUIPMENT.



NIKON CORPORATION
Fuji Bldg., 2-3, Marunouchi 3-chome, Chiyoda-ku,
Tokyo 100-8331, Japan

www.nikon.com/

NIKON INSTECH CO., LTD.
Parale Mitsui Bldg., 8, Higashida-cho, Kawasaki-ku,
Kawasaki, Kanagawa 210-0005, Japan
phone: +81-44-223-2167 fax: +81-44-223-2182
<http://www.ave.nikon.co.jp/inst/>

NIKON SINGAPORE PTE LTD
SINGAPORE phone: +65-6559-3618 fax: +65-6559-3668
NIKON MALAYSIA SDN. BHD.
MALAYSIA phone: +60-3-78763887 fax: +60-3-78763387

NIKON INSTRUMENTS EUROPE B.V.
P.O. Box 222, 1170 AE Badhoevedorp, The Netherlands
phone: +31-20-44-96-222 fax: +31-20-44-96-298
<http://www.nikon-instruments.com/>

NIKON FRANCE S.A.
FRANCE phone: +33-1-45-16-45-16 fax: +33-1-45-16-00-33

NIKON GMBH
GERMANY phone: +49-211-9414-0 fax: +49-211-9414-322

NIKON INSTRUMENTS S.p.A.
ITALY phone: +39-55-3009601 fax: +39-55-300993

NIKON AG
SWITZERLAND phone: +41-43-277-2860 fax: +41-43-277-2861

NIKON UK LTD.
UNITED KINGDOM phone: +44-20-8541-4440 fax: +44-20-8541-4584



NIKON CORPORATION
Instruments Company



NIKON CORPORATION
Yokohama Plant

NIKON INSTRUMENTS INC.
1300 Walt Whitman Road, Melville, N.Y. 11747-3064, U.S.A.
phone: +1-631-547-8500; +1-800-52-NIKON (within the U.S.A. only) fax: +1-631-547-0306
<http://www.nikonusa.com/>

NIKON CANADA INC.
CANADA phone: +1-905-625-9910 fax: +1-905-625-0103