

Innovations To Meet Your Needs

Windows and Power Macintosh Software

Decoupled Computer Interface

- Compatibility with either PC or Macintosh computers
- SCSI II Interface

Cooled CCD Camera

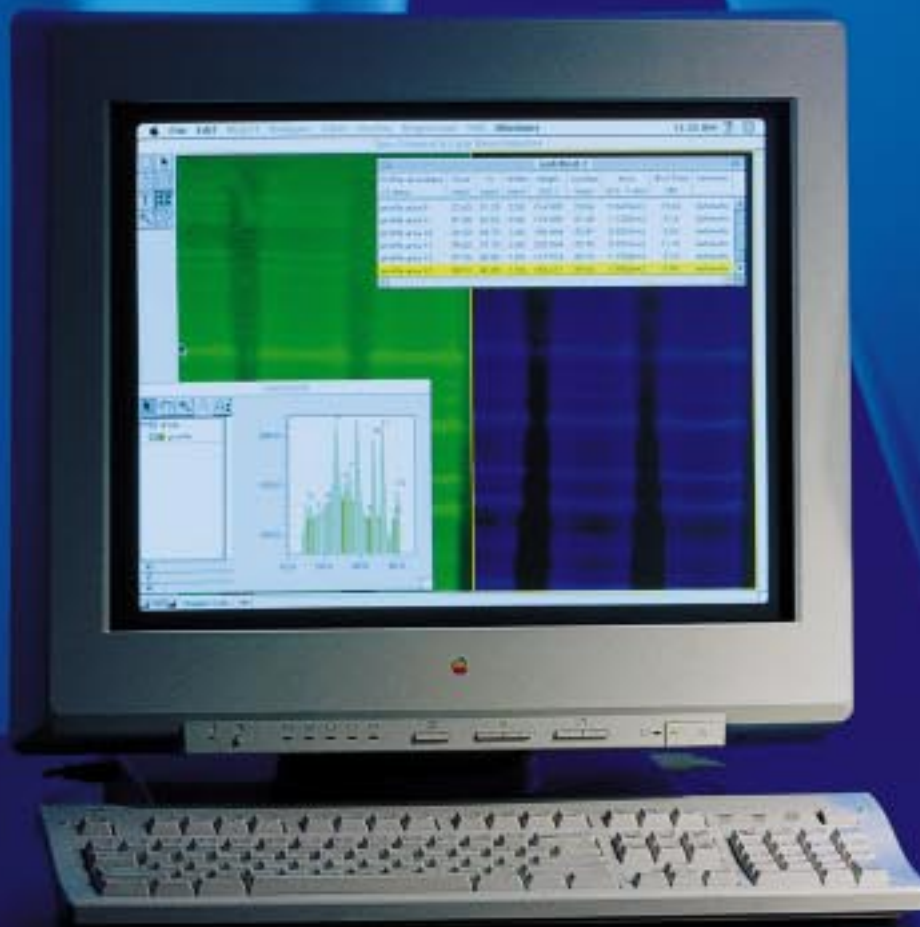
- 1340 x 1037 pixel resolution for greatest image quality
- 12-bit precision provides 3 orders of linear dynamic range
- Cooled CCD for greater signal-to-noise ratio and long integration times

Flexible Lenses

- Standard zoom lens allows variable spatial resolution to 150 μ
- Optional custom lenses are available for higher spatial resolution
- Compatible with most Nikon mounted lens for even greater flexibility

White Light and UV Scanning Illumination

- Analysis of gels, film, and transparent samples with UV and white light
- Higher uniformity than systems with stationary bulbs
- Faster image acquisition than laser scanning





Custom Image Processing

- Dark current subtraction to remove electronic background noise
- Dead pixel correction to correct dead pixels on CCD
- Flat fielding corrects non-uniformity of the lens and illumination system

Six Position Emission Filter Wheel

- Interchangeable filter sets
- Optional custom filters for future flexibility to new techniques

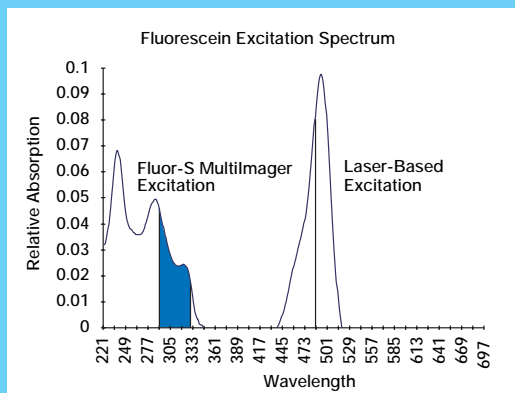
White Light and UV Epi-illumination

- Analysis of blots and opaque samples with UV and white light
- Flexible to new fluorescent or chemifluorescent techniques

Large Sample Stage

- 25 cm x 30 cm imaging area
- 40 cm x 60 cm sample stage allows placement of large sample types

Imaging Technology and Advances



ethidium bromide
SYBR Green I
SYPRO Orange
Radiant Red
fluorescein (FITC)
rhodamine
coumarin

DEA coumarin
lissamine
naphthofluor
Texas Red
ABI dyes
Green Fluorescent Protein (GFP)

UV and White Light Scanning and Epi-Illumination

- Broad bandwidth UV light produces larger overall signal excitation, compared to that of laser systems resulting in high sensitivity.
- Broad bandwidth UV light excites many different fluorescent stains and labels and is not limited to single wavelength excitation
- Unlike laser point scanners, broad bandwidth UV light illuminates large sample areas and speeds up image acquisition. The Fluor-S Multimager can acquire images in seconds.
- Greater Stokes shift for better spectral discrimination between excitation and emission wavelengths and higher sensitivity.



Step 1: Select emission filter(s) and illumination source; Step 2: Position and zoom sample; Step 3: Preview image display; Step 4: Automatically integrate and save the image

State-of-the-Art Software

- Windows NT and PowerMacintosh compatibility
- Software controlled illumination, filter selection, and image capture.
- Automatic image integration, image save, and lane and band finding.
- High resolution and high sensitivity acquisition modes
- Saturated pixel detection



Customization and Flexibility

- Optional custom lenses for higher spatial resolution
- Compatibility with most Nikon mounted lens for even greater flexibility
- Optional custom emission filters for future fluorescent techniques
- Bio-Rad reagents and kits
- Bio-Rad application protocols

Integrated Systems and Software



Storage Phosphor Imaging Systems



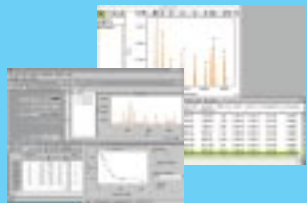
Densitometry Systems



Gel Documentation Systems



Confocal Imaging Systems



Specialized Software

Fluor-S Multimager Specifications

Detector	Peltier Cooled CCD
Pixel Density	12-bit
Linear Dynamic Range	3 Orders (Extendable through multiple imaging)
Pixel Resolution	1340 x 1037 pixels
Spatial Resolution	150µ (Custom higher resolution lenses available)
Sensitivity	1-5 femtomoles FITC
Scan Speed	1 second - unlimited
Illumination Modes:	Scanning and Epi-illumination
Emission wavelengths	520nm-660nm, 530nm, 520nm, 610nm (Custom filters available)
Excitation Source wavelengths	290nm-330nm, White Light
Software	Windows NT and PowerMacintosh
File Size	1.5 MB or 2.7 MB
File Format	TIFF and BRIFF (Bio-Rad Image File Format)
Imaging Area	25 cm x 30 cm
Sample Stage	40 cm x 60 cm
Dimensions	60 cm (L) x 40 cm (W) x XX cm (H)
Weight	168 Kg

Fluorescent Reagents and Kits

SYPRO Orange Fluorescent Protein Stain

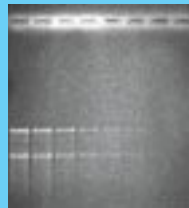
SYPRO Orange fluorescent protein stain is highly sensitive and easy to use to visualize 1-D and 2-D SDS-PAGE and native protein gels. Unlike other stains, SYPRO Orange staining does not permanently fix proteins in the gel so you can blot / elute following staining. Furthermore, SYPRO Orange does not overstain and does not stain nucleic acids.



SYPRO Orange stained gel

Radiant Red Fluorescent RNA Stain

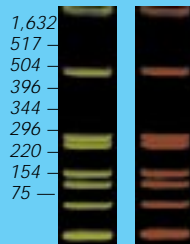
Radiant™ Red RNA Stain is a highly sensitive fluorescent stain for the visualization of RNA following electrophoresis in denaturing agarose gels. RNA staining with Radiant Red is an accomplished in a single 30-minute step without pre-soaking or destaining.



E. coli RNA stained with Radiant Red (30 min.)

Two-Color Fluorescent Standards

Achieve the ultimate in fragment sizing accuracy, with Bio-Rad's Two-color Fluorescent DNA Standards. Multicolor imaging, or multiplexing, allows fluorescent labeled standards to be loaded with samples in each gel lane. The fluorescent standards are labeled with fluorescein and Texas Red and can then be clearly distinguished from unknown samples on the basis of color.



pBR322 *Hin*FI digest
A. Labeled with Fluorescein
B. Labeled with Texas Red

Ordering Information

Catalog No.	Description
170-7700	Fluor-S Multimager-PC 100-240V
170-7701	Fluor-S Multimager-Mac 100-240V
170-3120	SYPRO Orange Fluorescent Protein Stain
170-3122	Radiant Red Fluorescent RNA Stain
170-3123	Fluorescein Low Range DNA Standards
170-2124	Texas Red Low Range DNA Standards

BIO-RAD

**Bio-Rad
Laboratorie**

**Molecular
Bioscience Group**

U.S. (800) 4BIORAD • California (510) 741-1000 • Australia 02-9914-2800 • Austria (1)-877 89 01 • Belgium 09-385 55 11 • Canada (905) 712-2771 • China (01) 2046622 • Denmark 39 17 9947 • Finland 90 804 2200 • France (1) 49 60 68 34 • Germany 089 318 84-0 • India 91-11-461-0103 • Italy 02-21609 1 • Japan 03-5811-6270 • Hong Kong 7893300 • The Netherlands 0318-540666 • New Zealand 09-443 3099 • Singapore (65) 272-9877 • Spain (91) 661 70 85 • Sweden 46 (0) 8-735 83 00 • Switzerland 01-809 55 55 • United Kingdom 0800 181134

Applications for Today and Tomorrow

The Fluor-S Multimager is the essence of flexibility and affordability in a one-source quantitative imaging system for fluorescence, chemiluminescence, chemifluorescence, densitometry, and gel documentation. Coupled with our powerful Multi-Analyst software, Fluor-S is highly sensitive and designed for accurate results in many different applications.



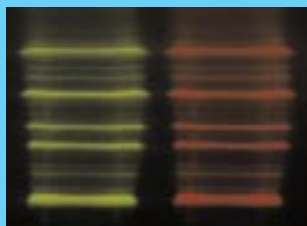
Ethidium Bromide Stained Gel

Single-Color Fluorescence

- High sensitivity detection with many fluorescent stains and labels including ethidium bromide, SYBR Green I, SYPRO Orange, fluorescein, rhodamine, coumarin, and Texas Red
- Femtomole sensitivity of end-labeled DNA
- Picogram sensitivity of stained DNA



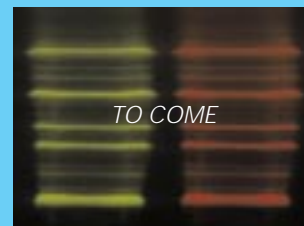
Ethidium Bromide Stained Gel



Fluorescein and Texas Red Labeled Gel

Multi-Color Fluorescence

- Automated multi-channel acquisition and display of 3 or more fluorescent dyes
- Greater molecular weight accuracy and sample throughput by multiplexing standards and unknowns



Fluorescein and Texas Red Labeled Gel



Chemiluminescent Western Blot

Chemiluminescence

- Sensitivity comparable to film
- Detection of Horseradish Peroxidase (HRP)-activated substrates including ECL[®], SuperSignal[™], and SuperSignal[™] Ultra
- Detection of Alkaline Phosphatase (AP)-activated substrates including CDP-star[®], CSPD[®], AMPPD[®] and SuperSignal[™] NA



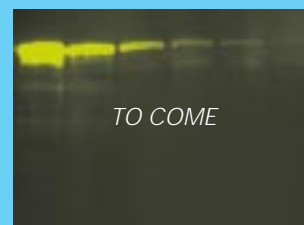
Chemiluminescent Western Blot



Chemifluorescent Western Blot

Chemifluorescence

- Detection of nucleic acids and proteins on membranes
- Compatible with available chemifluorescent reagents and kits



Chemifluorescent Western Blot



Coomassie Blue Stained Gel

Densitometry

- High sensitivity to colorimetric stains including Coomassie[®] Blue and silver stain
- Analysis of a variety of samples including 1-D and 2-D gels, autoradiograms, blots, slides, and microplates



Coomassie Blue Stained Gel