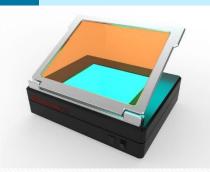


Website: www.genebiosystems.com
E-Mail: info@genebiosystems.com





2023 GeneBio Systems Instruments Catalog







Micro-Volume Spectrophotometer

GeneBio Systems is a team of specialists dedicated to providing high-performance, and cost-effective products. We strive to serve the scientific community by offering laboratory products for both clinical and academic research. Supporting some of the most research-intensive institutions in Canada, we are committed to fufilling laboratory needs in all aspects of Molecular and Cellular Biology. Established in 2011 in Toronto Ontario, GeneBio Systems is a small yet rapidly growing company in the biotechnology industry. Over the past 10 years, we've served researchers and scientists all over Canada, and are continuing to expand into the United States of America.



MICRO-VOLUME SPECTROPHOTOMETER

MaestroNano is a specialized instrument for bio-chemical research, especially for micro-volume solution concentration measurement.

MaestroNano has a whole new technology of optical system design. There is NO optical fiber needed. Moreover, with the vertical slide design, the sample measuring area is more durable and stable.

MaestroNano has a reliable measurement range of concentration from 2 to 2000 (ng/ μ L) and has a great resistance for the interferences of ambient light to get more accurate measurement.

Specification

Measurement Sample Size 2 ul

Measurement Data Output (A)OD230nm, OD260nm, OD280nm, OD320nm

(B)Sample concentration (ng/ul)

(C)OD260nm/OD230nm, OD260nm/OD280nm

Minimum Concentration 2 ng/ul (dsDNA), 1.6 ng/ul (RNA)

Maximum Concentration 2,000 ng/ul (dsDNA), 1,600 ng/ul (RNA)

Light Propagation Material Quartz glass **Absorbance Range (10mm)** 0.04 ~ 40

Pathlength ~0.5 mm

Measurement Time < 5 sec

Operation System Android OS (ver. 4.4.3)

LCD Resolution 7 inches, 1024(W)x 600(H) dots matrix

Light Source Xenon flash lamp

Internal Storage 32GB

Data Output Interface Thermal printer

Data Connection interface 1. Wi-Fi x 1 (USB dongle)

2. OTG USB \times 1 (connected to PC to access)

3. Ethernet x 1 (RJ-45)

4. USB x 1

Maintenance Auto diagnosis, Calibration Program,

Fix pathlength

Operating Voltage 12 V

Dimensions 20(W) X 21(D) X 33(H) cm

Weight 3.5 Kg





MICRO-VOLUME SPECTROPHOTOMETER

- Focus on nucleic acid and protein 230nm/260nm/280nm/320nm
- Convenient
 2 µl sample only, measurement in less than 5 seconds
- Accurate
 High reproducibility and repeatability
- User-friendly interface
 Touch screen, USB, Wi-Fi, ethernet and QR code
- All-in-one
 Embedded computer and thermo printer
- Low-cost operation
 No plates or other consumables
- Best concentration range
 2 ng/μL~2,000 ng/μL (dsDNA) without dilution





• Reliable, repeatable, and reproducible concentration

MaestroNano Pro does not intend to change light path-length during measurement to reduce frequency of calibration. Instead, MaestroNano Pro develops and offers an in-house mathematical algorithm to help users acquire more reliable, repeatable, and reproducible bio-chemical solution concentrations.

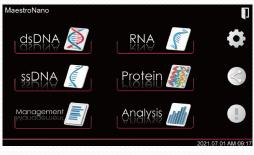
• Non-optical-fiber design

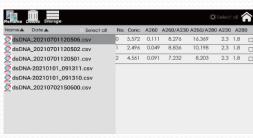
With MaestroGen's new technology, non-optical-design, MaestroNano Pro can offer the high reliability in accuracy and prevent from the unavoidable issue caused by the attenuation of light intensity in the optical path when the device equipped with fiber-optic components as consumables.

• High precision in the positioning of optical path

The height of optical path-length is precisely fixed in 0.5mm by fixed pin. Compared to other micro volume spectrophotometers, which need to be constantly calibrated to maintain the precision and to make the optical path length into position, MaestroNano Pro works with a metal cover that can "straightly" go up and down in y-axial via a reliable slider and that way contributes to the rigid positioning of the optical path length in y-axis and always to be perpendicular to the bottom quartz glass.











Accessible measurement results

The measurement results can be accessible via the embedded touch panel, thermal printer, USB storage as well as Wi-Fi transfer.

• Adjustable light intensity contributes to the stable performance In order to prevent from the impacts caused by the derivations in various environmental conditions, such as different ranges of temperature, humidity, latitude, etc., and to make sure the measurement for the same sample should be leaded to the same results, the adjustable light source provides with the adjustable voltage in intensity. With this new technology, user just needs two micro-liter of ddH₂O as the standard volume, and gets back to the stable performance again via the built-in calibration mode.

Compared to other spectrophotometers

There are some kinds of micro volume spectrophotometer for DNA, RNA and protein right now. But MaestroNano Pro is definitely the most special one. Most spectrophotometers use whole wavelength spectrum from 200nm to 900nm, need calibration by experts time to time, and install software in another stand-alone computer to operate. MaestroNano Pro provides a much better and more economical solution for most functions. By using the specific useful wavelengths (230/260/280/320nm) and automatic calibration, the embedding operating system offers an outstanding performance of accuracy and a much lower price compared to other spectrophotometers. Also, MaestroNano Pro is a "non-optical-fiber" system, which can contribute to the longer product life-time compared to others embedded with optical fiber as consumables.



Transilluminator

UltraSlim® LED Transilluminator UltraBright LED Transilluminator UltraSlim UV Transilluminator UltraBright UV Transilluminator BandPeeper LED Transilluminator SlimWhite

Whole New designs! Transilluminators are the first choices for analytical applications with cutting-edge construction for increased performance and efficiency.

Optimized for use with nucleic acid and protein stains such EtBr, SYBR® Safe, SYBR Gold, SYBR® Green I & II, SYPRO® Ruby, SYPRO® Orange, Coomassie FluorTM Orange stains, GelGreen, GelRed and LumiteinTM Protein Gel Stain.

UltraSlim® LED Transilluminator

Smaller and strong

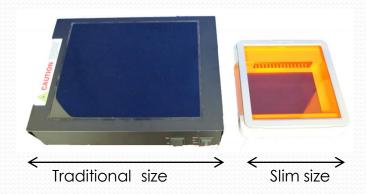
- Smaller: Sinale-handedly take
- Accurate:<10% CV across the full filter area
- Sensitivity:Up to 1 ng nucleic acid
- No damage to you and your samples
- Easy:
 Easy for observation and gel cutting





The UltraSlim LED Transilluminator is designed for viewing stained gels on the laboratory bench, or within gel documentation systems. The dimensions are only $210(W) \times 210(D) \times 30(H)$ mm.

Lighting from the LED source inside the instrument produces blue light with a narrow emission peak centered at approximately 470 nm, which is more effective for the excitation of most nucleic acid and protein stains.





Ordering Information and Specification:

Products	UltraSlim LED
Cat No.	SLB-01W
Outer dimensions (mm)	210D x 210W x 30H
View size (mm)	120D x 70W
Wavelength (nm)	470 nm
Light source	Blue LED light
Uniformity	10 % CV
Power	DC24V/1.25A
Weight (Kg)	2.3kg

Related product:

	Products	MaestroSafe Nucleic Acid loading dye	MaestroSafe Prestained dye	MiniCute Imager
	Cat No.	MR-031201	MR-031203	MC-02
~~~~~~~~~~~~~~~~	Description	Substitute for loading dye	Prestained with agarose	Imagers for DNA and protein gels photography which is also easy for gel cutting after photography

# UltraSlim Blue LED White Light panel

#### ILLUMINATOR

The UltraSlim LED illuminator is not only designed for viewing DNA/RNA gels, also has a whole new white light panel to use for protein gels on the laboratory bench, or within gel documentation systems.

Lighting from the LED source inside the instrument produces blue light with a narrow emission peak centered at 470 nm and a high brightness white light, which is more effective for the excitation of most nucleic acid and protein stains.



#### Specification

Cat no. SLB-03W (SLB-01W+SW-04)

Dimensions (mm) 210 (D)* 210 (W)* 30 (H)

View Size (mm) 120 (D)* 70 (W) - Blue

130 (D)* 90 (W) - White

Light Source Blue LED (470nm)+White LED

Uniformity 10% CV

Blocking filter Amber color

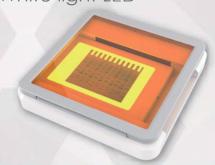
Power DC 12V / 2.5A

Weight (Kg) 2.6

# DNA/RNA gel Blue light LED



# Protein gel White light LED



## **UltraBright LED Transilluminator**

Safe for You, Good for your sample

- Accurate:
  - < 5% CV across the full filter area
- Sensitivity:
  - Up to 1 ng nucleic acic
- Safe:
  - No damage to you and your samples
- Easy
  - Easy for observation and gel cutting
- Flexibility:
  - Suit for several kinds of stains and adjustable intensity





The UltraBright LED Transilluminator is designed for viewing stained gels on the laboratory bench, or within gel documentation systems.

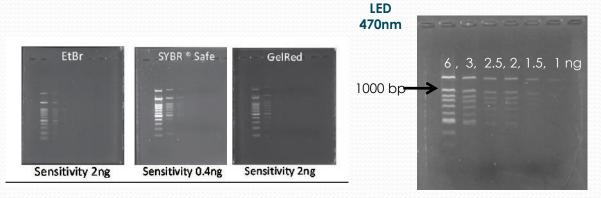
Light from the LED source inside the instrument producing light with a narrow emission peak centered at approximately 470 nm, effective for the excitation of nucleic acid and protein stains such EtBr, SYBR® Safe, SYBR Gold, SYBR® Green I & II, SYPRO® Ruby, SYPRO® Orange, Coomassie Fluor™ Orange stains, GelGreen, GelRed and Lumitein™ Protein Gel Stain.



Variance of light < 5%, the best spec in the world



The best uniformity and intensity



The best sensitivity (1 ng) when MaestroSafe is used combined with MaestroGen LED Transilluminator.

#### Ordering Information and Specification:

Products	UltraBright LED Transilluminator		
Cat No.	LB-16	LB-17	
Outer dimensions (mm)	280D x 340W x 80H	280D x 340W x 80H	
View size (mm)	160D x 200W	160D x 200W	
Wavelength (nm)	470 nm	470 (Blue), 530 (Green), 630 (Red); no 630(Red) filter	
Light source	Blue LED light	Blue Green Red LED light	
Uniformity	< 5% CV	< 5% CV	
Power	24V - 1.25A	24V - 1.25A	
Weight (Kg)	3.6 kg	3.6 kg	

#### Related product:

Products	MaestroSafe Nucleic Acid loading dye	MaestroSafe Prestained dye	MiniCute Imager
Cat No.	MR-031201	MR-031203	MC-02
Description	Prestained with agarose.	Substitute for loading dye.	Imagers for DNA and protein gels photography which is also easy for gel cutting after photography

UltraBright® Blue/Green LE

TRANSILLUMINATOR )

MaestroGen UltraBright
Blue/Green LED Transilluminator is
designed for viewing stained gels on the
laboratory bench. With high power LEDs and dichroic filter inside the instrument producing a powerful

emission light and remove background completely, effective for the excitation stains such as EtBr, SYBR Green, GelGreen, GelRED, GFP, EGF-Pand. In addition, the light source won't be caused DNA degradation.

#### Specification

B ue/Green



Comparison the Ethidium Bromide gel results with Blue/Green LED light and UV light

Cat. NO.: LB-18

Wavelength: 505nm

Light Source: Nichia LED

**Viewing Size:** 160(D)*200(W)mm

Blocking Cover: Aluminum alloy metal frame

Consumption: 24 Watt

Filter: Amber color

Power: AC100-240V~50/60 Hz

Weight: 3.8 Kg

**Dimensions:** 280(D)* 340(W)* 80(H)mm

### **UltraSlim UV Transilluminator**

#### As small as it can be

- Smallness:
   One-handed lifting
- Accuracy:<5% CV across the viewing area</li>
- Sensitivity: Up to 0.5 ng nucleic acid Higher S/N ratio
- Easy for observation and gel cutting



This UV Transilluminator is equipped with a new-design UV blocking cover which is easily detachable for access to the work surface.



#### Ordering Information and Specification:

<b>Products</b>	UltraSlim UV Transilluminator
Cat No.	UUV-01
Outer dimensions (mm)	247D x 132W x 48.5H
View size (mm)	150D x 80W
Wavelength (nm)	302 nm
Light source	UV lamp X1
Uniformity	+/- 5 %
Power	DC12V/1.5A
Weight (Kg)	1.4 kg





### **UltraBright UV Transilluminator**

High contrast, Strong frame

- Accuracy:
  - < 5% CV across the viewing area
- Sensitivity:

High contrast with strong frame, up to 0.1 ng nucleic acid

Safety:

UltraSafe UV blocking cover block 99.99% UV transmittance

Ease:

Easy for observation and gel cutting

Flexibility:

Adjustable intensity





	U	V transmittance	MaestroGen	Conventional
	U	VA (365 nm)	< 0.1%	8%
	U	VB (302 nm)	0%	0.38%
UltraSafe®	100			Conventional
	90	302 nm 365	nm	
	80			MaestroGen
	70			
(%) e	60			
rasmittance (%)	50			
Trasm	40			
	30			
	20 -			
	10		1 1	UV Blocking Cover
	_o L		— Conventiona	TOV Blocking Cover
	200	250 300 350		550 600 650 7
			Wavelength (nm)	

High contrast and 99.99% UV transmittance

#### Ordering Information and Specification:

Products	UltraBright UV Transilluminator			
Cat No.	MLB-21	MB-21	MLB-16	MB-16
View size (mm)	210D x 260W	210D x 260W	160D x 200W	160D x 200W
Wavelength (nm)	302 & 365nm	302 nm	302 & 365nm	302 nm
Light source	UV tubes: 11 x	UV tubes: 6 x	UV tubes: 9 x	UV tubes: 5 x
Light source	8W	8W	8W	8W
Blocking cover	Aluminum alloy frame			
Power	100-240V, 50-60Hz			
Weight (Kg)	4.3kg			
Outer dimensions (mm)	280D x 340W x 80H			

#### Related product:

Products	MiniCute Imager
Cat No.	MC-02
Description	Imagers for DNA and protein gels photography which is also easy for gel cutting after photography



#### **Our Information**

**Current Warehouse:** 5109 Harvester Rd, Unit 12B, Burlington, ON, Canada L7L 5Y9

Our New Warehouse in 2023: 760
Laurentian Drive, Unit 20, Burlington, ON
L7N 3W7

info@genebiosystems.com

order@genebiosystems.com

647 770-8019

Toll-free 1(833)-LabShop 1(833)-5227467

Join Us-Career Opptunities

We are hiring-Two <u>Sales Reps</u>, in Ontario and GTA Region -Please send your application to admin@genebiosystems.com

• GET DIRECTIONS

### **BandPeeper LED Transilluminator**

### Real-time in gel

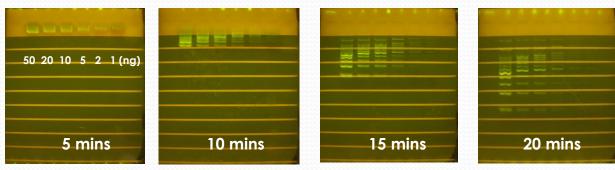
- Innovation:
  - The first platform for real-time electrophoresis in gel in the world
- Convenient:
   Time and cost saving for new sample electrophoresis trial & error
- Sensitivity:2 ng nucleic acid
- Safe:
   No damage to you and your samples

MaestroGen offers BandPeeper real-time electrophoresis LED transilluminator for DNA gel fluorescent signal observation in water solution. Compatible with Mupid-size tank (Mupid exU series: Mupid exU, Mupid ACE, and Mupid ONE)





- Accurate electrophoresis duration control
- Strong blue LED used with common nucleic acid dyes
- Anti-fog design on amber filter; anti-water condensation
- No decay for DNA gel (UV flashlamp decays DNA gel)



The real-time observation of electrophoresis in gel

#### Ordering Information and Specification:

Products	BandPeeper LED Transilluminator
Cat No.	RT-172
Outer dimensions (mm)	166D x 170W x 51H
Window size (mm)	150D x 60W
Wavelength (nm)	470 nm
Light source	Blue LED light
Filter type	Amber filter
Power	24V - 1.25A
Weight (Kg)	0.9 kg
Filter surface	Anti-Fog treatment
PCBA surface	Anti-moisture treatment
Compatibility	Mupid tanks (Mupid exU series: exU, ACE, and ONE)

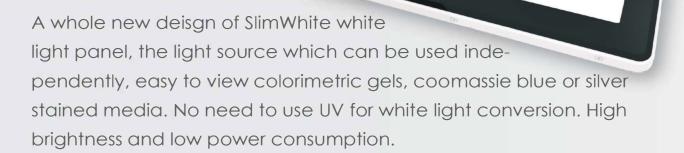
#### Related product:

Products	MaestroSafe Nucleic Acid loading dye	MaestroSafe Prestained dye
Cat No.	MR-031201	MR-031203
Description	Substitute for loading dye	Prestained with agarose

Website: <a href="www.genebiosystems.com">www.genebiosystems.com</a>
E-Mail: <a href="mailto:info@genebiosystems.com">info@genebiosystems.com</a>

### **SlimWhite**





#### •Uniform:

Illumination is designed by light guide plate with diffuser

#### • Easy to observe:

Light source is under the gel, avoid bubble and reflection issue

#### Cost Effective:

Long lifetime (~50,000 hrs), low power consumption

Trans-illumination



Good contrast
(O)

**Epi-illumination** 

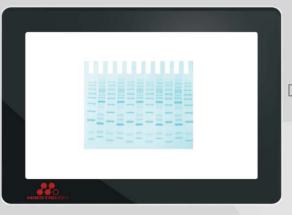


Light reflection issue (X)



Bubble issue





### Specification

Cat no.: SW-02

Dimensions (mm): 292 (D)* 217 (W)* 12.8 (H)

View Size (mm): 240 (D)* 160 (W) Light Source: White light LEDs

Power: DC12V

Weight (Kg): 1.2

# **Imager**

New Slider Imager Mini-Imager MiniCute Imager

MaestroGen designs the imagers for DNA and protein gels photography which is also easy for gel cutting after photography.





# Mini-imager

**GEL DOCUMENTATION SYSTEM** 

Mini-imager™ is a small compact imager with digital camera embedded with dual lights of blue LED source (470nm) and UV bulb (302nm) illuminators.

Away from complicating operation, recording electrophoresis result is just as simple as to take a selfie. Besides that, you can easy to transfer data and print it directly via WiFi function of digital camera.

FASE

NEW CAMERA UPGRADE!!

**EOS** 

#### Specification

Cat no.: MI-01

Dimensions (mm): 250 (D)* 203 (W)* 364 (H)

80 (D)* 150 (W) View Size (mm): Wavelength (nm): 302nm,470 nm

> Light Source: UV,LED

Compatible gel size(mm): 50*60, 105*60,125*60

> Camera: Canon M-series type

Effectivepixel: 24.2 Megapixels

> LCDSize: 3" TFT Color

> > 15mm ~45mm lens, F1.8 (W) - F11.0 (T) Lens:

Mode: (P),(A),(S),(M)

ISO: Auto, 100, 200~51200

(recommend under ISO800 for operation)

Shutter Speed(s): 1/4000~30second

Video Output: NTSC/PAL selectable (HDMI)

Interface: USB(v.2.0),Wi-Fi

Storage Media: SD,SDHCmemorycard Storage Format: JPEG(ExifVer2.3), RAW

108* 66.6* 35 Dimensions(mm):

> DC12V / 2A adapter Power:

Weight (Kg): 4.8







# Mini-Imager[®]

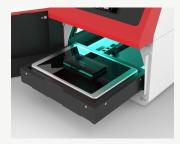
**GEL DOCUMENTATION SYSTEM** 

Mini-imager™ is a small compact gel documentation system it uses a digital camera and also embedded with dual lights of blue/green light source(505nm) and white light panel.

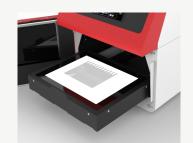
It's a very easy and efficient way to use for the DNA/RNA and proteins gels Seprate surface plates design that don't need to worry about the

contamination issues

Not only could operate the camera directly with large LCD monitor but also the camera could be controlled by software of computer.



Metal-plate for DNA gels



White light panel for Protein gel Metal-plate storage space



Embedded 7" LCD monitor



#### Specification

Cat no.: MI-02

Dimensions (mm): 300 (D)* 310 (W)* 450 (H)

View Size (mm): 160 (D)* 200 (W) Light Source: Blue/Green, White

Filter: Amber, Clear

Camera: Canon M-series type

Effectivepixel: 24.2 Megapixels

LCD Monitor: 7" TFT Color

Lens: 15mm ~ 45mm lens, F1.8 (W) – F11.0 (T)

Mode: (P), (A), (S), (M)

ISO: Auto, 100, 200 ~ 51200

(recommend under ISO800 for operation)

Shutter Speed(s): 1/4000 ~ 30second

Video Output: NTSC/PAL selectable (HDMI)

Interface: USB(v.2.0), Wi-Fi

Storage Media: SD, SDHCmemorycard Storage Format: JPEG(ExifVer2.3), RAW

Storage Format: JPEG(ExifVer2.3), RAW Power: DC12V / 2.5A adapter

Power: DC Weight (Kg): 5.0



MiniCute Imager

#### **GEL DOCUMENTATION SYSTEM**

MiniCute imager, compact size, compatible with MaestroGen's UV and blue LED transilluminators.

- •100% fit to all MaestroGen's LED or UV illuminators
- •Branded digital camera, 100% dark room for photography

MiniCute imager is an easy gel image system, recommend to use with UltraSlim® LED Illuminator, UltraBright LED Transilluminator and UltraBright UV Transilluminator



#### COMPACT

#### Specification

Cat no.: MC-02

Dimensions (mm): 275 (W)* 238 (D)* 250 (H)

Filter: Amber filter and UV-cut filter

Weight (Kg): 1.1

Camera: Canon M-series type

Effectivepixel: 24.2 Megapixels

LCDSize: 3" TFT Color

Lens: 15mm ~45mm lens, F1.8 (W) – F11.0 (T)

Mode: (P),(A),(S),(M)

ISO: Auto, 100, 200~51200

(recommend under ISO800 for operation)

Shutter Speed(s): 1/4000~30second

Video Output: NTSC/PAL selectable (HDMI)

Interface: USB(v.2.0),Wi-Fi

Storage Media: SD,SDHCmemorycard Storage Format: JPEG(ExifVer2.3),RAW

Dimensions(mm): 108* 66.6* 35







**UltraSlim**[®]

Blue LED illuminator (SLB-01W)



UltraBright LED Transilluminator (LB-16, LB-18)



UltraBright UV Transilluminator (MLB-21,MLB-16,MB-21,MB-16)