

# SERVA Musketeer

**SERVA**  
■ serving scientists ■

## Gel Documentation

### The system

The SERVA Musketeer is an advanced gel documentation system with user-friendly features, easy operation and quick response. This imaging system consists of a scientific CCD camera (16 bit, cooled -55 °C +/- 5 °C to ambient, 6X6 Bin mode), motor driven lens, and white backlight board. The chemiluminescence treatment such as ECL can easily be observed and captured by the SERVA Musketeer.



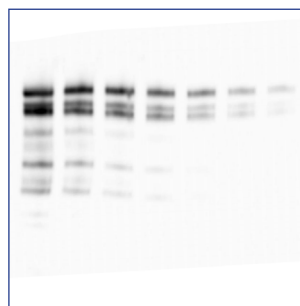
- Cooled CCD camera for chemiluminescence
- RGB Table and 5fold filter wheel for fluorescence
- White light transilluminator for VIS imaging
- UV transilluminator for nucleic acid imaging
- Epi white light and Epi RGB light sources
- Absolute sealed darkroom, movable 3-level platform for CL
- For gel sizes up to 260 mm x 200 mm
- 10,4" Touch LCD panel for intuitive software operation
- USB data storage

### The configuration

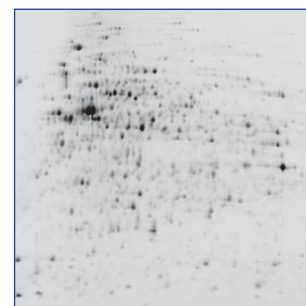
Followed the all-in-one design concept of a single workstation, the SERVA Musketeer works independently and does not require a separate computer to operate the system. A built-in touch screen LCD panel of the SERVA Musketeer can directly handle the entire imaging procedure without any difficulty.

Moreover, the smart user-friendly interface and vivid icons on the SERVA Musketeer allow for capturing of the gel images quickly and easily. With SERVA Musketeer, you will experience a hassle free process of collecting the gel imaging data in your laboratory.

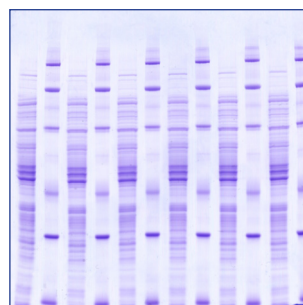
SERVA Musketeer is equipped with red, green, and blue LED transilluminator and epi lights and the appropriate filters. Thus, wide range of fluorescence applications may be processed through light source excitations. UV and white light transilluminator as well as epi white light are installed.



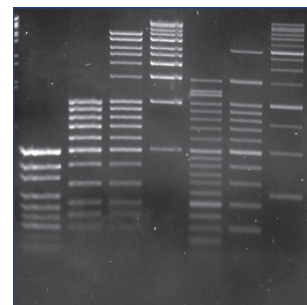
Chemiluminescence  
(e.g. SERVALight Vega)



Fluorescence  
(e.g. SERVA Lightning Red)



Colorimetric  
(e.g. Coomassie®)



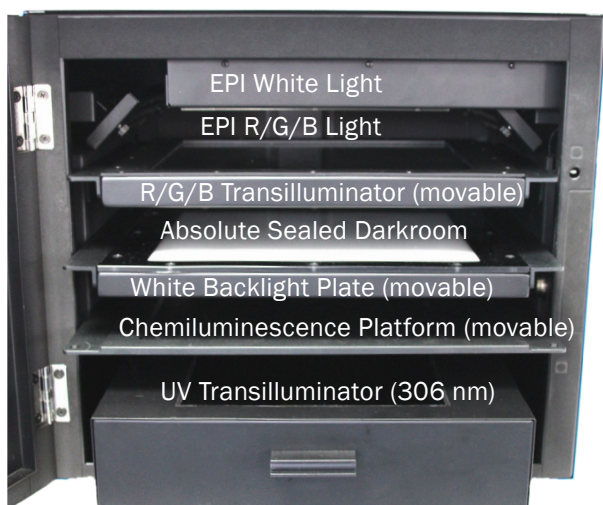
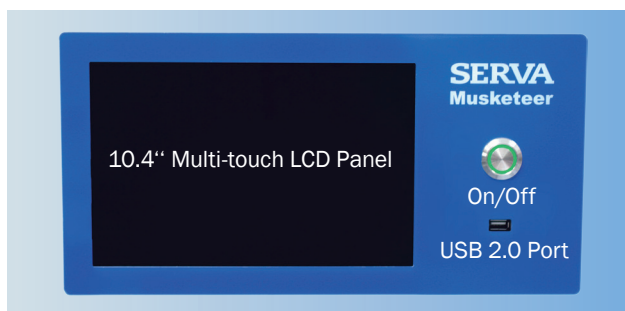
UV light  
(e.g. ethidium bromide)

### SERVA Electrophoresis GmbH

Carl-Benz-Str. 7 · D-69115 Heidelberg · Germany  
Phone: +49 (0) 6221 13840-0 · Fax: +49 (0) 6221 13840-10  
E-Mail: info@serva.de · Internet: www.serva.de

### Some main applications in SERVA Musketeer gel documentation:

- No light applications: Chemiluminescence-labelled Western blots
- Blue light applications: SERVA Lightning Red (1D, 2D), SERVA Purple, SERVA Lightning Sci2, Cy2, SERVA Fluo-R, SERVA DNA Stain Clear G, SYBR stains, SYPRO Ruby, FITC, ethidium bromide, etc.
- Green light applications: SERVA Lightning Sci3, Cy3, AlexaG 546, AlexaG 555, AlexaG 568, Nile red, Rhodamine B, TRITC, etc.
- Red light applications: SERVA Lightning Sci5, Cy5, AlexaG 647, AlexaG 660, allophycocyanin, TO-PROG-3, etc.
- UV light applications: EtBr stained nucleic acid gels (agarose, PAA)
- White light applications: Coomassie stained protein gels (SDS, IEF etc.), autoradiograms
- White light epi light applications: Ponceau S or related colorimetric stained Western blots



### Specifications

#### Control Panel

Display	10.4" Multi-touch LCD Panel
OS	Embedded Linux

#### Camera

Sensor	6M CCD
Resolution	2,736 x 2,160 Pixels
Pixel Size	4.54 µm x 4.54 µm
Cooling Temperature	-55 °C from Ambient
Exposure Time	10 ms - 90 min

#### Optical

Auto Focus	Yes
IRIS	F0.95
Zoom	12 cm x 9 cm
	19 cm x 14 cm
	26 cm x 20 cm
	Manual operation
Filter	6 Positions (Motor-powered)
Viewing Area	26 cm x 20 cm

#### Light Source

UV	306 nm UV Transilluminator
White Light	White Backlight Plate Epi White Light
R/G/B	R/G/B Transilluminator Epi R/G/B Light

#### Lift Plate

3 Lift Level	Manual Adjustable
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#### Connection

USB 2.0 Port	3x (Front 1x, Rear 2x)
10/100 Ethernet	1x (Front)

#### Capture

UV	Yes (Transilluminator)
R/G/B	Yes (Transilluminator, Epi)
White Light	Yes (Transilluminator, Epi)
Chemiluminescence	Yes

#### Certificates

CE & FCC	Yes
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#### Dimensions

L x W x H	452 x 423 x 659 mm
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#### Weight

Net Weight	52 kg
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### Ordering Information

Product	Quantity	Cat. no.
SERVA Musketeer	1 piece	MSK-01