

Gel documentation

JY series Gel Document Imaging System is intended for band observation after electrophoresis run. DNA or other biomolecular cannot be seen under natural light, but with the help of UV light and high resolution CCD, DNA or other biomolecular can be visualized with a fluorescent stain such as ethidium bromide.

By using the JY series gel document imaging system, the electrophoresis band is analyzed by using software technology and the band picture can be zoomed in or zoomed out according to user's requirements.

JY04S-3C Gel documentation



- CCD with lower lux and high-resolution, easy to get dim stripes and real-time browse, whole-screen display and simple to operate:
- Six time zoom lens and simple to enlarge and shrink gel photos.
- The center position indicator, which can ensure the gel is placed in the center position.
- Intelligent control box:
 - You can realize the control of the zoom, focus, aperture, UV light and white light through panel key.
 - Safety function for your eyes that automatically shuts down the UV light when the door is opened and reactivates the UV light when the door is shut.
 - Timed shut down: The UV light protection system automatically shuts down the lights after 15 minutes to maximize the life of lamp and vitreous.
 - The zoom lens is protected with RS232 interface.
 - Drawer-style gel platform, convenient to observe, operate, and cutting gel.
- Transferring plate changes UV-light into white-light.
- Using a multi-layer gel-filter effectively filters background noise.
- You can realize the control of the zoom, focus, aperture, UV light and white light through computer mouse.
- Regular and reliable system convenient to maintain and exchange parts.

Technical specifications for JY-series Gel documentation

	JY04S-3C	JY04S-3E
Effective pixels	1280×1024	2560×1920
Pixel density	10 bit	10 bit
Pixel size	5.4×5.4 (um)	5.4×5.4 (um)
Resolution	1.4 megapixels	5.0 megapixels
Signal to noise ratio	≥56db	≥56db
Sensitivity	Can detect the double chain DNA of EB staining below 20pg.	Can detect the double chain DNA of EB staining below 20pg.
Camera	low illumination and high resolution digital CCD	low illumination and high resolution digital CCD
Zoom lens	F=1:1.2, 2/3 inch 6 times zoom lens	F=1:1.2, 2/3 inch 6 times zoom lens
Filter	590 (nm)	590 (nm)
UV light transmission area(W×L)	250×200 (mm)	250×200 (mm)
Visible light transmittance area(W×L)	250×210 (mm)	250×210 (mm)
Transmission UV wavelength	302 (nm)	302 (nm)
Reflectance UV wavelength	254、365 (nm)	254、365 (nm)
Transmission UV lamp power	302nm (8W)	302nm (8W)
Reflectance UV lamp power	254nm (11W) 、365nm (11W)	254nm (11W) 、365nm (11W)
Volume (L×W×H)	470×405×820 (mm)	470×405×820 (mm)
Weight	29.0 (kg)	29.0 (kg)



The center position indicator



UV protective cover, cutting operation is simple and safety.



- ① Gel observation door
- ② Gel drawer
- ③ The gel observation port

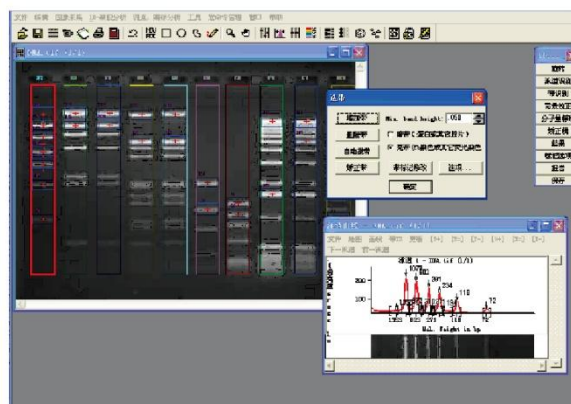
1. Real time image preview and photograph

- ① The exposure value adjustment: according to the different experimental conditions, automatically or manually adjust the exposure value, can achieve the best effect of exposure.
- ② Light control button: You can control the white light and UV lamp through the computer.
- ③ Fine and coarse adjustment button: Users can choose the regulation speed;
- ④ Zoom, focus, aperture adjusting button: you can adjusted the image size, focal length and the aperture by computer.
- ⑤ Flip vertical button: according to the need to flip the image;
- ⑥ Image capture button: you can take and save the image to a pictures.



2. Image analysis

- ① You can recognition the lane automatically or manually.
- ② You Can automatically and manually on the colony density, dot hybridization analysis, cloning count.
- ③ You can calculation and comparison the Molecules of nucleic acid, protein content, optical density, mobility and pH value and percentage content.
- ④ You can export all kinds of experimental report to a text or Excel format file and print.



3. Image processing

- ① You can assist data shows, and provides text, arrows, graphics and other annotation tool for misoperation, unlimited undo data for protection.
- ② You can adjust the image of rotate, zoom, color, cut, brightness, grayscale, and contrast.

JY04S-3C/3E Packing configuration

Parts name	Packing quantity
Mainframe	1
UV protective cover	1
Transferring plate	1
Control line	1
USB line	1
5A insurance tube	2
Power cord	1