CLINX

# BV 200A
# Blue Light Transilluminator

## User Manual

# Contents

# 01 Description

**BlueVision200A** blue light transilluminator is used in life science field. It is an instrument used to observe and cut electrophoresis gel, using blue LED light with wavelength of 470mm as an excitation light source. The instrument is applicable for different safe dyes such as SYBR Safe, SYBR Gold, SYBR Green I & II, SYPRO Ruby, SYPRO Orange, Coomassie Fluor Orange stains, Gel Green, etc. Users can completely get rid of the use of harmful UV light and carcinogenic EtBr. Clinx Gel Signal™ Green nucleic acid dye is recommended to use to achieve the best results.

# 02 Features

- Exquisite appearance, ultra-thin design, and easy to carry and use;
- Easy to cut gel, and no need to wear protective goggles;
- Evenly transilluminated blue light module and low brightness background makes specimen observing and photographing results better;
- Applicable for a variety of safe dyes, so as to replace the highly carcinogenic EtBr;
- Blue light source, protecting users from UV light and preventing DNA fragments from damaging;
- The color filter lid can be adjusted (0-100°) and fixed, which is easy to operate the instrument and observe the specimen;
- High-power lamp bead, long-term energy saving and environment friendly, no need to replace the lamp, and brightness adjustable.

# 03 Safety Information

Please read the safety information carefully to avoid possible failures which may cause electric shock, and/or damage!

**Installation** ⚠

- The BV200A is an electronic instrument. Do not touch the power cord or socket with wet hands.
- Do not place the instrument in an unstable, humid or dusty environment.
- It is strictly forbidden to fine-tune, alter or modify the product in any way, and Clinx will not be responsible for any injury or damage caused thereby.
- Please use the supplied certificated power cord for the instrument.

**Use** ⚠

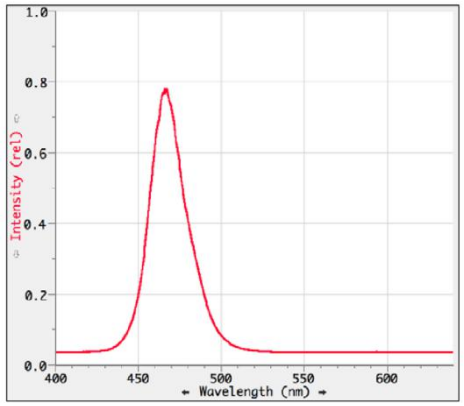
- Forbid to hit the glass panel with metal or hard objects in case of scratching or damaging.
- BV200A does not produce UV light, but it does utilize an intense blue light to observe gels. Please be noted that published literature has identified blue light as a possible risk factor for macular degeneration, however, no clinical studies have been published. Therefore, please use the amber filter lid provided to protect eyes and avoid prolonged observation.

**Cleaning** ⚠

- Please remove the adapter to power off the instrument before cleaning.
- Clean the glass panel in time after use to prevent the electrophoresis solution from polluting the gel cutter, and keep the instrument ventilated and dry.
- Do not clean the lid of color filter with alcohol or any other cleaning agents. A piece of soft cotton cloth or a dust collector could be used.

## 04 Specifications

| Parameters | |
|---|---|
| Gel viewing area | 170mm*130mm |
| Blue light wavelength | 470nm |
| LED working life | >30,000 小时 |
| Brightness adjustment | 10-100% six levels adjustable |
| Color filter lid | amber |
| Color filter adjustable angle | 0-100° |
| Auto shutdown | 5 minutes |
| Power input | 100-240VAC 50/60Hz |
| Instrument input | 12VDC 2.0A |
| Dimension(L*W*H) | 204mm*210mm*30mm |
| Net weight | 1.25kg |
| **Working condition** | |
| Ambient temperature | 5℃-40℃ |
| Relative humidity | 20%-70% |




Emission spectrum

## 05 Package Contents

- Blue Light Transilluminator 1
- Power Adapter 1
- User Manual 1
- Warranty Card 1
- Certificate of Approval 1

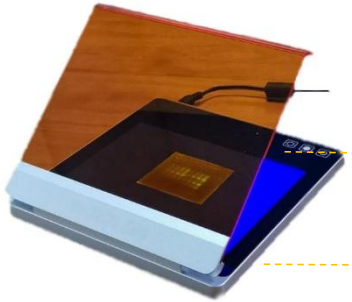
## 06 Installation

Take the transilluminator with its packing out of the carton and do as follows:

1. check the packing list, and save the user manual and warranty card;
2. place the instrument onto a stable and aclinic worktable;
3. remove the films from color filter lid and gel viewing stage carefully;
4. connect the instrument and socket with the power adaptor;
5. touch the switch of the panel, and the installation is finished when it is lighted.

## 07 The use

1. Connect the instrument and socket with the power adaptor;
2. gloves are recommended so as to prevent skin contacting the specimen directly;
3. lift the lid of the color filter, and place nucleic gel/specimen onto the glass surface;
4. touch the switch to power on the instrument;
5. the LED inside will emit evenly blue light;
6. adjust the brightness during observing or operating;
7. touch the switch after the experiment to power off the instrument, and the light will be off;
8. Clean the glass surface after using.



Lid

Gel viewing area on glass surface

Power adaptor interface

Brightness level indicator

Brightness reduction touching button

Brightness increase touching button

Power touching button

## 08 Troubleshooting

Please refer to the following to solve problems:

| Problem | Cause | Solution |
|---|---|---|
| Low sensitivity | The wavelength excited by fluorescent dyes is not within the range of 440-500nm. | Change fluorescent dye. |
| | The specimen concentration is insufficient. | Concentrate the specimen. |
| No reaction when touching the switch | The power cord is not plugged in properly. | Plug the power cord well. |
| | There is no power supply in the socket. | Make sure the power works well and use the adaptor provided together with the instrument. |
| | The startup & shutdown and light increase & reduction is out of control. | The touching area is not clean, or the gloves used are too thick. |

## 09 Warranty

The warranty is 1 year. If any defects occur during this period, CLINX will repair or replace the defective parts without any charge.

Except for damages caused by the following reasons:

1. operate improperly;
2. Repair or modify the instrument by other companies;
3. replace the parts provided by other companies instead of Clinx;
4. pollution and corruption caused by improper reagents, solvents or specimens.

## 10 Technical Support

If you have any question about use or operation of the products, please contact us,

Clinx Science Instruments Co., Ltd.

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