# **UView™ Mini Transilluminator**

## **Instruction Manual**

Catalog #166-0531





#### Hardware Instruction Manual

The UView<sup>™</sup> mini transilluminator is suitable for research use only. It must be used by specialized personnel who know the health risks associated with UV radiation and with the reagents that are normally used with this instrument. The use of protective eye glasses, mask, and gloves is strongly recommended when operating or in the vicinity of the transilluminator when the UV light is turned on.

## Warranty

The UView mini transilluminator is warranted against defects in materials and workmanship for 1 year. If any defects occur in the instrument or accessories during this warranty period, Bio-Rad will repair or replace the defective parts at its discretion without charge. The following defects, however, are specifically excluded:

- Defects caused by improper operation.
- 2. Repair or modification done by anyone other than Bio-Rad or an authorized agent.
- 3. Damage caused by substituting alternative parts.
- 4. Use of fittings or spare parts supplied by anyone other than Bio-Rad.
- 5. Damage caused by accident or misuse.
- 6. Damage caused by disaster.
- 7. Corrosion caused by improper solvent or sample.
- 8. Defects caused by using knives or other sharp implements to cut directly on top of the filter glass.

This warranty does not apply to parts listed below:

- Fuses
- 2. Lamps
- 3. Starters

For any inquiry or a request for repair service, contact your local Bio-Rad office. Inform Bio-Rad of the model and serial number of your instrument.

## **Regulatory Notice**

**Important:** This instrument is designed and certified to meet safety standards and EMC regulations. Certified products are safe to use when operated in accordance with the instruction manual. This instrument should not be modified or altered in any way. Alteration of this instrument will:

- 1. Void the manufacturer's warranty.
- 2. Void the safety and EMC certification.
- 3. Create a potential safety hazard.

Bio-Rad is not responsible for any injury or damage caused by the use of this instrument for purposes other than those for which it is intended, or by modifications of the instrument not performed by Bio-Rad or an authorized agent.

### **Important Notice**

Please read the instruction manual carefully before using the UView mini transilluminator. This instrument is intended for clinical and research laboratory use with DNA stained for UV activation, and it must be operated only by specially trained personnel aware of the potential risks associated with the chemical and biological agents normally used with this unit. This instrument is meant for use only by specially trained personnel who know the health risks associated with UV radiation and with reagents that are normally used with this instrument.

If the equipment is used in a manner not specified by the manufacturer, the protection provided by the equipment may be impaired.

## **Specifications**

Dimensions, mm: 247 x 132 x 48.5

 $(D \times W \times H)$ 

Viewing surface, mm: 150 x 80 (D x W)

Wavelength, nm: 365

UV tubes: T5 6 W UVA Power: 12 V. 1.5 A

Weight, kg: 1.4

Compatible gel type: mini gels

Compatible gel size, mm: 50 x 60, 105 x 60,

125 x 60

operation 0~40°C. Temperature:

storage -10~70°C

operation 20~80%, Humidity:

storage 10~90%

temperature -10~70°C, Transportation conditions:

humidity 10~90°C

Altitude conditions: up to 2,000 m

#### Installation

Carefully unpack the transilluminator and the shield as follows:

- 1. First, remove the UV shield at the top.
- 2. Remove the transilluminator from the packing materials and place it on a stable horizontal surface.
- 3. Remove the protective plastic film from the UV black glass filter.

#### Stand-alone Installation

- 1. Place the instrument on a bench and leave at least 10 cm of space all around it in order to ensure ample ventilation.
- Connect the instrument to a power source using the power cable. The power source must be able to deliver at least 12 V DC and 1.5 A. The plug must have a ground connection.
- 3. Install the socket outlet near the equipment and ensure that it is easily accessible.

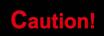
#### General Precautions

The transilluminator is equipped with thermal protection to prevent overheating.

Clean the transilluminator's UV filter surface after use. When using samples stained with ethidium bromide, decontaminate the transilluminator surface with bleach. Denatured alcohol can be also used. Always wear disposable gloves.

- Plug the transilluminator into an electric line with a ground connection
- Do not pour liquids directly on the transilluminator
- Do not block the aeration slits
- Switch off the instrument immediately after use
- Position the transilluminator to prevent harm to nearby operators

UV transilluminator provides high ultra violet radiation which can cause serious damage to unprotected eyes and skin. Before operating, be sure all personnel in the area are properly protected.

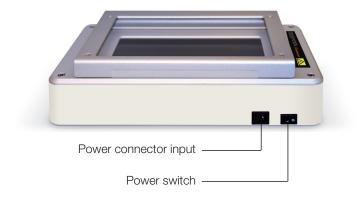




## Using the Transilluminator

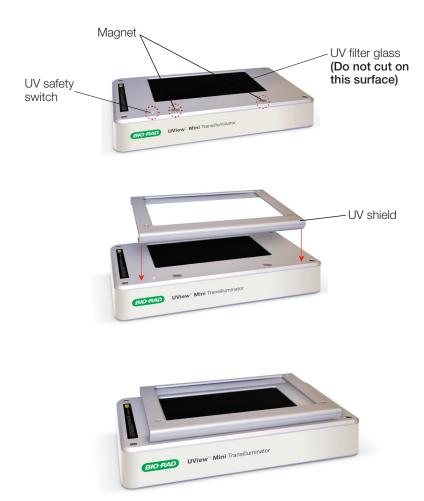
Place gel/sample on the filter area. We recommend the gels be placed on a gel tray to protect the filter surface from cuts and scratches. We recommend that gloves be worn to prevent skin contact with gel and staining agents.

Turn on the transilluminator via the power switch on the back of the unit. The tubes within the unit will begin glowing beneath the filter.



After viewing the sample, turn the transilluminator off by turning the power switch to the off position.

# **General Appearance**



UView mini transilluminator and UV shield. Magnets on the top of the device hold the UV shield in place.



UV shield held in place by the magnets. Shield is also positioned to depress the UV safety switch.

## **UV Safety Mechanism**

Only when the UV shield is attached on the housing above the glass filter in such a way as to press down the UV safety switch can the power switch on the back side be turned on.

#### **Bulb Replacement**

Attention: If substances known to be dangerous to health are used on the transilluminator, clean and treat the instrument for proper decontamination. Please use protective gloves when handling and opening the device.

To ensure optimal function, replace the bulb after every 500 hours of use.

- 1. Decontaminate the instrument per the instructions given in the section "GENERAL PRECAUTIONS."
- 2. Remove the power cable from the power supply.

3. Remove the top cover of the transilluminator by using a hexagon wrench (No. 3) tool to release the four screws (Hex socket cap screws, M3 Size) on the top of the device.



4. Remove the lid and lay it down on its back side. Avoid laying the glass side directly on the bench as this will scratch the glass surface. Carefully move wiring out of the way. Use caution and care when moving the wiring inside to prevent accidentally breaking connections.



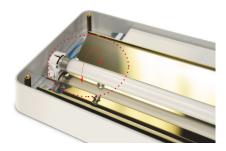


Be sure there is no power to the unit before replacing the UV bulb (T5 6 W UVA bulb). To replace, rotate the bulb to release it from the seats. Remove by rotating the bulb until the lateral pins are in a vertical position and then lifting it out.





6. Insert the new lamp into the lamp holders and rotate it until the pins are in a horizontal position. Turn the UV bulb until a locking sound from the UV seats is heard.



7. Place the top cover back on the device and fix the 4 screws back into the top-cover holes. Check the UV bulb function. Use the UV shield to protect your eyes before turning the power on. If the UV bulb does not work, check whether the bulb is installed properly.





### Important Safety Information

#### Important Notice

Use of the UView<sup>™</sup> mini transilluminator involves UV illumination. Proper precautions must be taken to avoid eye and skin exposure to the UV radiation. This instrument is meant for use only by specially trained personnel who know the health risks associated with UV radiation and the reagents that are normally used with this instrument. The acrylic shield provides some UV protection. However, it does not guarantee complete protection, and it is designed to shield only the person working in front of the system.



**WARNING:** The operator should wear appropriate safety glasses or a protective mask and gloves in addition to using the UV Safety Shield provided with this instrument.

#### **Technical Support**

Bio-Rad offers technical support for all of its products. If you have any questions about this product's use or operation, please contact Bio-Rad at the address or phone number below.

Bio-Rad Laboratories, Inc. 2000 Alfred Nobel Drive, Hercules, CA 94547 (800) 424-6723





#### Bio-Rad Laboratories, Inc.

#### Life Science Group