

# WHITE LIGHT TRANSILLUMINATOR 2000

# **Instruction Manual**

Catalog numbers 170-8124 and 170-7943



#### **WARRANTY**

The White Light transilluminator 2000 is warranted against defects in materials and workmanship for 1 year. If any defect occurs in the instrument or accessories during this warranty period, Bio-Rad Laboratories will repair or replace the defective parts at its own discretion without charge. The following defects, however, are specifically excluded:

- 1. Defects caused by improper operation.
- 2. Repair or modification done by anyone other than Bio-Rad Laboratories or an authorised agent.
- 3. Damage caused by substituting alternative parts.
- 4. Use of fittings or spare parts supplied by anyone other than Bio-Rad Laboratories.
- 5. Damage caused by accident or misuse.
- 6. Damage caused by disaster.
- 7. Corrosion caused by improper solvent or sample.

This warranty does not apply to parts listed below:

- Fuses
- Lamps
- Starters

The warranty general conditions are indicated in the attached warranty card that has to be filled in and sent back.

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

### REGULATORY NOTICE

**IMPORTANT:** This Bio-Rad instrument is designed and certified to meet EN 61010\* 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:

- Void the manufacturer's warranty
- Void the EN61010 safety and EMC certification
- Create a potential safety hazard

Bio-Rad Laboratories 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 Laboratories or an authorised agent.

<sup>\*</sup>EN 61010 is an internationally accepted electrical safety standard for laboratory instruments.



#### IMPORTANT NOTICE

Before installing this unit, please read carefully the installation instructions.

This instrument is intended for clinical and research laboratory use and must be operated only by specialised personnel aware of the potential risks connected to the chemical - biological agents normally used with this unit.

Contact your local Bio-Rad Laboratories representative if service is required.

### **INSTALLATION**

#### Unpacking

Carefully unpack the transilluminator as follows:

- First remove the cardboard inside the box.
- Remove the transilluminator from the two cardboard shells and place it on a stable, horizontal surface.
- Remove the blue protection film from the WL Filter.

#### Stand alone installation

- The instrument must be placed on a bench leaving at least 10 cm of space all around in order to avoid any obstacle that may reduce the ventilation.
- Connect the instrument to the power using the annexed cable. The power font must be able to deliver at least 250 VA with a voltage from 100 to 240 Vac. The plug must have a ground connection.
- Position the acrylic face shield sliding it below the transilluminator.

The instrument is supplied in two versions: 230 Vac or 115 Vac. Before connecting the cable to the power, verify that the voltage selectr is set to the right power.

#### Installation with the Bio-Rad Gel Doc 2000:

This instrument has been designed in order to be lodged inside the Gel Doc 2000 – Gel Documentation System and with the Instadoc system.

In this case follow the instructions included in the Gel Doc 2000 or Instadoc manuals or any other instrument that will be released in the future.

## **SWITCHING ON**

To switch ON the instrument press the switch «Power ON/OFF».



The instrument is also provided with a thermal protection in order to avoid to exceed 50°C inside the instrument.

If the green key of the «Power ON/OFF» is lighted without that the lamps light it could be activated the thermal protection, this happens after an uninterrupted use of at least 1 hour. Switch Off the key and wait for cooling of the instrument.

### LAMPS AND/OR STARTER REPLACEMENT

Attention: if substances dangerous for the health are used the instrument must be cleaned and treated for a perfect decontamination. When the instrument is open it would be better to use protection gloves.

All the internal circuits are fed at 230Vac independently by the line voltage through an autotransformer.

To ensure a good instrument running replace the lamps every 500 hours of working.

- Decontaminate the instrument as per the instruction given in the chapter "General precaution";
- Remove the power cable;
- Unscrew out the screws on both sides of the instrument;
- Remove the lid putting it down on the back side making attention to the grounding cable now connected (do not put the filter directly on the bench);
- Remove the lamp rotating it until the lateral pins be in a vertical position;
- In case of replacement of a starter, remove it by rotating anticlockwise;
- Insert the new lamp into the lamp holders and rotate it until the pins be in a horizontal position;
- To replace the starter insert it in the holder and rotate clockwise;
- Reassemble the lid so that the grounding cable slides under the reflecting panel and retighten the screws on both sides.

It is essential to assemble the lid before making any test. Follow in any case the instructions in the chapter SWITCHING ON.

#### **FUSES REPLACEMENT**

The fuses are on the side of the power module entry on the right lateral panel. It's very easy to replace them following this procedure:

- Remove the power cable;
- Unscrew the plastic screws of the fuse holder with a screw driver;
- Replace the fuses with others of suitable power (0,8A for 230-240Vac e 1,6A for 100 and 115 Vac).
- Retighten the fuse holder screws.



### **GENERAL PRECAUTIONS**

- Connect the instrument **ONLY** with electric line connected to the ground or to the Gel Doc 2000.
- The instrument is equipped with a thermal protection for its overheating. During the normal use (5-15 min.) the instrument doesn't reach the temperature to switch off the thermal protection; if the instrument is left switched on for at least 1 hour the thermal protection automatically switch off the lamps (internal temperature around 48 °C) and the green light of the main switch remains lighted. When the temperature come back to 38°C the lamps turn on again.
- Do not pour out liquids directly on the instrument.
- · Do not blank the aeration slit.
- Switch off the instrument immediately after its use.
- Clean well the filter after its use. Avoid alcohol or organic solvents that can damage the plastic filter. Use only aqueous solutions of soaps and mild detergents Always wear disposable gloves.

#### **SPECIFICATIONS**

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Voltage 100/230 Vac 50/60 Hz +/- 10%

Fuses 0.8/1.6 Amp

Consumption 120 VA max

Physical data

**Dimensions** 

Width 28 cm Length 36 cm Height 10 cm

Weight 9,5 kg

Operating conditions

Temperature 5-40°C

Relative Humidity max 80Manufactured by:



## **Ordering Information**

170-7943 WL Transilluminator 2000 (100-115 Vac/60 Hz)

Including: Instruction Manual

Power Cable

Spare Fuses 1.6 Amps

170-8124 WL Transilluminaror 2000 (220-240 Vac/50 Hz)

Including: Instruction Manual

Power Cable

Spare Fuses 0.8 Amps

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