UltraBright UV Transilluminator

Instruction Manual

Catalog Number MB-21

Version 03_26

Hardware Instruction Manual

This UV transilluminator is suitable for research use only. It must be used by specialized personnel that know the health risks associated with UV radiation and with the reagents that are normally used with this instrument. The UV-blocking screen provides UV protection. However, it does not guarantee complete protection. It is designed to shield the person working at the UV transilluminator only. The use of protective eyeglasses, mask, and gloves is strongly recommended when operating or when in the vicinity of the transilluminator with the UV lights turned on.

WARRANTY

The UV 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, MaestroGen will repair or replace the defective parts at its 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 MaestroGen or an authorized agent.
3. Damage caused by substituting alternative parts.
4. Use of fittings or spare parts supplied by anyone other than MaestroGen.
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:

1. Fuses
2. Lamps
3. Starters

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

REGULATORY NOTICE

IMPORTANT: This MaestroGen 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

MaestroGen 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 MaestroGen or an authorized agent.

IMPORTANT NOTICE

Please read the installation instruction carefully before installing the UV transilluminator. This instrument is intended for clinical and research laboratory use with Ethidium Bromide gel activation and it must be operated only by specialized 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 specialized personnel that know the health risks associated with UV radiation and with reagents that are normally used with this instrument. The UV-blocking 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.

SPECIFICATIONS

- Dimensions (mm): 280D x 340W x 80H
- Viewing surface (mm): 210D x 260W
- Wavelength (nm): 302
- UV blocking: UV blocking shield with metal frame
- UV tubes: 11 x T5 8W (302nm x 11)
- Power: 100~240V, 50/60Hz
- Weight (Kg): 4.3

INSTALLATION

Carefully unpack the transilluminator and the shield as follow:

1. First remove the bubble material at the top.
2. Remove the transilluminator from the two bubble material shells and place it on a stable, horizontal surface.
3. Remove the plastic protection film from the UV black glass filter.

Stand alone installation

1. 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.
2. 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 between 100 and 240 Vac. The plug must have a ground connection.

Installation with the Standard Documentation System:

This instrument has been designed to work with the Standard Documentation System. In this case follow the instructions included in the Standard Documentation manual or any other instrument that will be released in the future.

GENERAL PRECAUTIONS

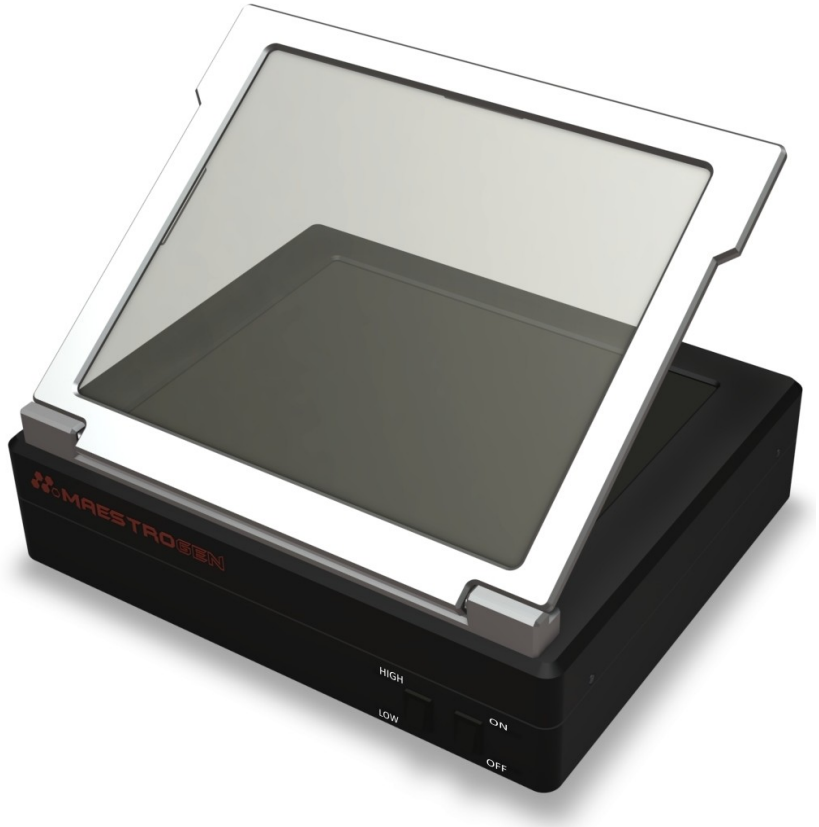
- Plug the transilluminator on an electric line with ground connection.
- The transilluminator is equipped with thermal protection to prevent overheating.
- Do not pour liquids directly on the transilluminator.
- Do not block the aeration slits.
- Switch off the instrument immediately after its use.
- Position the transilluminator to prevent harm to nearby operators.

· The transilluminator surface is a UV filter. Clean the UV filter surface after use. When using the transilluminator with samples stained with Ethidium Bromide, decontaminate the transilluminator surface with bleach. Denatured alcohol can be also used. Always wear disposable gloves.

Using the Transilluminator

Place gel/sample on the filter area. It is recommended that researchers place the gels on a Gel-Tray to protect the filter surface from cuts and scratches. It is recommended that gloves be worn to prevent skin contact with gel and staining agents. Press the ON/OFF switch to ON. The tubes within the unit will begin glowing beneath the filter. Dial the knob to the appropriate intensity setting. After viewing the sample, turn the transilluminator off.

General Appearance of the UV transilluminator



Front Panel of the UV transilluminator



High/Low: Intensity adjustment (100% & 50%)
ON/OFF: Power switch of the UV lamps

Rear Panel of the UV transilluminator



AC input: 100~240 V; 50/60 Hz power source
I/O: AC input power switch; switch “ON” when AC power line plugged
Fuse: Replacement position

LAMPS 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 transilluminator.

Depending on the fuse installed on the transilluminator, all internal circuits are fed at 110 or 240Vac independently by the line voltage through an autotransformer.

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

1. Decontaminate the instrument as per the instruction given in the chapter "General precaution".
2. Remove the power cable.
3. Remove the screws on both sides of the transilluminator.
4. Remove the lid and lay it down on its back side. Avoid laying the cover with the glass side directly on the bench as this will scratch the glass surface. Please, note that there is a grounding cable that connects the cover to the base.
5. Remove the lamp by rotating it until the lateral pins are in a vertical position.
6. Insert the new lamp into the lamp holders, and rotate it until the pins are in a horizontal position.

It is essential to assemble the lid before making any test.

FUSE REPLACEMENT

The fuses are located on the rear panel, the same side as the power entry module.

1. Remove the power cable.
2. Open the fuse holders.
3. Replace the fuses with others of suitable power (2.0A for 100~240Vac).
4. Close the fuse holder.

TECHNICAL SUPPORT

MaestroGen offers technical support for all of its products. If you have any questions about the product's use or, operation, please contact MaestroGen at the following info.

E-Mail: info@maestrogen.com