

MacroVue UV-26

transilluminator





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English

Important user information

Please read this entire manual to fully understand the safe and effective use of this product. Should you have any comments on this manual, we will be pleased to receive them at:

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Français

Renseignements importants d'utilisation

Pour une bonne compréhension et une utilisation en sécurité maximale, il convient de lire entièrement ce manuel. Tous vos commentaires sur ce manuel seront les bienvenus et veuillez les adresser à:

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Español

Información importante para el usuario

Para comprender el producto y utilizarlo con seguridad es necesario leer este manual en su totalidad. Si desearan hacer algún comentario sobre este manual, tengan la amabilidad de remitirlo a:

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Deutsch

Wichtige benutzerinformationen

Für ein vollständiges Verständnis und eine sichere Handhabung dieses Produktes ist es notwendig, daß der Benutzer dieses Handbuch vollständig durchliest. Wenn Sie Anmerkungen zu diesem Handbuch haben, dann senden Sie diese bitte an:

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Italiano

Informazioni importanti per l'operatore

Per un utilizzo sicuro del prodotto, leggere attentamente l'intero contenuto del presente manuale. Si prega di inviare eventuali commenti al presente manuale a:

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Waste Electrical and Electronic Equipment (WEEE)

ENG



This symbol indicates that the waste of electrical and electronic equipment must not be disposed as unsorted municipal waste and must be collected separately. Please contact an authorized representative of the manufacturer for information concerning the decommissioning of your equipment.

FRA



Ce symbole indique que les déchets relatifs à l'équipement électrique et électronique ne doivent pas être jetés comme les ordures ménagères non-triées et doivent être collectés séparément. Contactez un représentant agréé du fabricant pour obtenir des informations sur la mise au rebut de votre équipement.

GER



Dieses Symbol kennzeichnet elektrische und elektronische Geräte, die nicht mit dem gewöhnlichen, unsortierten Hausmüll entsorgt werden dürfen, sondern separat behandelt werden müssen. Bitte nehmen Sie Kontakt mit einem autorisierten Beauftragten des Herstellers auf, um Informationen hinsichtlich der Entsorgung Ihres Gerätes zu erhalten.

ITA



Questo simbolo indica che i rifiuti derivanti da apparecchiature elettriche ed elettroniche non devono essere smaltiti come rifiuti municipali indifferenziati e devono invece essere raccolti separatamente. Per informazioni relative alle modalità di smantellamento delle apparecchiature fuori uso, contattare un rappresentante autorizzato del fabbricante.

SPA



Este símbolo indica que el equipo eléctrico y electrónico no debe tirarse con los desechos domésticos y debe tratarse por separado. Contacte con el representante local del fabricante para obtener más información sobre la forma de desechar el equipo.

SWE



Denna symbol anger att elektriska och elektroniska utrustningar inte får avyttras som osorterat hushållsavfall och måste samlas in separat. Var god kontakta en auktoriserad tillverkarrepresentant för information angående avyttring av utrustningen.



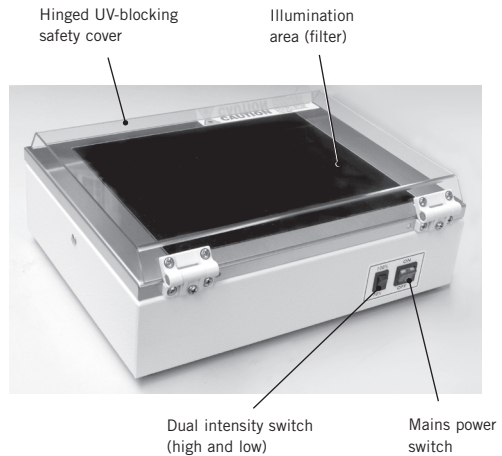
● pvi

UV transilluminator function

The Hoefer™ MacroVue™ Dual-intensity UV transilluminator provides a uniform and intense source of 302 nm ultraviolet light to back-illuminate transparent fluorescent materials. Nucleic acids stained with fluorescent dyes such as ethidium bromide and acridine orange can be detected under UV illumination. This visualization method is especially suitable for double-stranded nucleic acids, but is less sensitive for visualizing single-stranded nucleic acids.

The MacroVue UV-26 filter surface is 21 × 26 cm. The light intensity level can be set to either high or low. Either transilluminator can be converted from 302 nm (medium wavelength) to 254 nm (short wavelength) by replacing the UV lamps as described in the Care and maintenance section.

Fig 1. MacroVue Transilluminator main components.



Unpacking

Unwrap all packages carefully and compare contents with the packing list, making sure all items arrived. If any part is missing, contact your local Hoefer, Inc. sales office. Inspect all components for damage that may have occurred while the unit was in transit. If any part appears damaged, contact the carrier immediately. Be sure to keep all packing material for damage claims or to use should it become necessary to return the unit.

Specifications

Ultraviolet lamps

- Six 8-W 302 nm UV dual bi-pin discharge type tubes.

Filter

- The factory-installed filter is for 254 nm and 302 nm lamps only. Do not use with 365 nm lamps.
- The expected life of the filter: 5000 hours @ 302 nm
3000 hours @ 254 nm.

Input fuses

- T 2A/250V 5 × 20 mm (2 fuses)

Dimensions (h × d × w)

External: 12.1 × 35.0 × 35.5 cm
(4.75 × 13.75 × 14.00 in)

Safety

- The filter is covered by a 3 mm (1/8")-thick UV blocking safety shield.
- Complies with the requirements of EC directives: 89/336/EEC, 73/23/EEC and EN 61010-1.

Features

- The dual-intensity switch toggles to a lower UV intensity for preparative work.
- Removable power cord.
- Lighted power switch.

Note: Swirl patterns in the UV filter, if present, do not interfere with viewing or photo documentation of gels.

Important safety information



- When working near UV radiation, always wear at least a UV-blocking face shield and cover all exposed skin. For added eye protection, wear goggles. Make sure all persons in the area are also properly protected.
- Lower the UV-blocking safety cover before switching the UV lamps on. Always wear protective clothing even with the cover closed to prevent accidental exposure to UV radiation. If the cover has been removed, you must wear a safety shield and gloves to prevent damage to eyes and skin.
- If possible, locate the transilluminator in a controlled environment such as a darkroom.
- Always disconnect the mains power cord before cleaning the unit or replacing fuses or lamps.



Operating instructions

1

Place the unit on a stable and level surface. Allow space around the unit for air to circulate freely.

2

Plug the power cord into the receptacle at the back of the unit and into a properly-grounded electrical outlet of the proper voltage rating. (The voltage rating of the unit is indicated on the label above the power cord receptacle.)

3

Attach the UV-blocking shield to the transilluminator chassis. Remove the 4 screws located at the top edge of the front panel. With these screws, fasten the 2 hinges of the UV-blocking shield to the chassis.

4

Don goggles, a UV-blocking face shield, gloves and cover all exposed skin.

5

Place the sample on the filter and lower the UV-blocking clear protective cover. *Note:* To remove the safety cover for photography, remove the 4 screws that fastens the hinges to the unit. Take extra precautions to prevent skin and eye exposure if the protective cover is removed.

6

Set the dual intensity switch to high and switch the power to on (I). The indicator lamp in the on/off switch should light, and after a momentary flickering, the UV lamps should light and be visible beneath the protective cover.

Note: To protect the filter from cuts and corrosive buffers, cover it with a protective surface such as the Hoefer UV transmitting work surface before placing the sample.

7

To reduce the UV intensity, set the dual intensity switch to low. The drop in intensity will diminish the level of sample fluorescence.

The high-intensity setting is for analytical documentation and the low setting is for preparative work (the lower setting reduces photonicking and photobleaching).

8

After viewing the sample, turn the unit off and clean according to the instructions in the Care and maintenance section.

Care and maintenance

Cleaning

- Clean the filter surface after each use.
- Use a mild detergent and water on a soft cloth or sponge to clean the unit exterior.
- Never use abrasive cleaners, solvents, or chloroform on any part.



Caution! Always turn off the transilluminator and disconnect the plug from the mains power before cleaning.

Replacing UV lamps

The transilluminator is originally equipped with 302 nm UV lamps. If 254 nm wavelength is required, replace all lamps with 254 nm lamps of the specified wattage.

Visually check that all lamps are illuminated. If one or more lamps are burned out, it is recommended that all lamps be replaced at the same time to ensure even light intensity. When one or more tubes are burned out, the functioning tubes will flicker for a moment when the unit is turned on. A security device will then switch off all the tubes automatically. To replace each lamp:



1

Important! Turn the unit off and disconnect the power cord from the mains power.

2

Remove the filter/cover by unscrewing the retainer screws located on the sides of the cover.

3

If present, remove the tape that secures the lamps during shipping. Remove each lamp by carefully rotating it $\frac{1}{4}$ turn and then carefully pulling it upward.

4

To insert the new lamp, hold it so that the metal pins at the end are vertical. Place the lamp in the socket and lightly push it up into place. Rotate the tube $\frac{1}{4}$ turn until it locks into place.

5

Replace the filter/cover and screw in the retainer screws.

Replacing fuses

Fuses protect equipment by disconnecting loads too large for the instrument's circuit design. For continued protection, **only replace fuses with the specified voltage and current ratings.**

The fuse holder tray located below the main power cord receptacle holds two T 2A/250V 5 × 20 mm (Slow blo) fuse.



1

Caution! Set the power switch to off and detach the power cord before replacing fuses.

2

Insert a small flat-blade screwdriver behind the tab of the fuse holder tray and pull out.

3

Pull the fuse out of its holder and inspect. If the fuse element is burned or broken, replace the fuse with an identical type. If the fuse appears to be intact, check it with an ohmmeter.

4

Insert a good fuse into the holder and then insert this assembly back into the unit. Seat the fuse holder tray by pushing the cover flush with the main power cord receptacle.

Troubleshooting

Unit does not operate when power is turned on

- Check that the power cord is plugged into a working electrical outlet.
- Remove and inspect the fuses.
- Check that the lamps are properly installed.

Lamps flicker excessively

- Check that the dual intensity switch is in the “high” position.
- Check for proper line voltage.

UV filter surface feels warmer than usual

- Ensure that there is enough space around the unit so that air can freely circulate.

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Ordering information

product	quantity	code number
MacroVue UV-26 Transilluminator		
21 × 26 cm viewing surface, 302 nm, 115–240 V	1	UV26
302 nm UV lamp, 8-W	1	UVLM-8
254 nm UV lamp, 8-W	1	UVLS-8
UV transmitting acrylic work surface, ½" thick, 24 × 36 cm	1	UVT-WS
Fuses	5	PSF2A-SB-5X20



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