



UV Transilluminator

Model: E3000

Operation Manual

Version 10.16



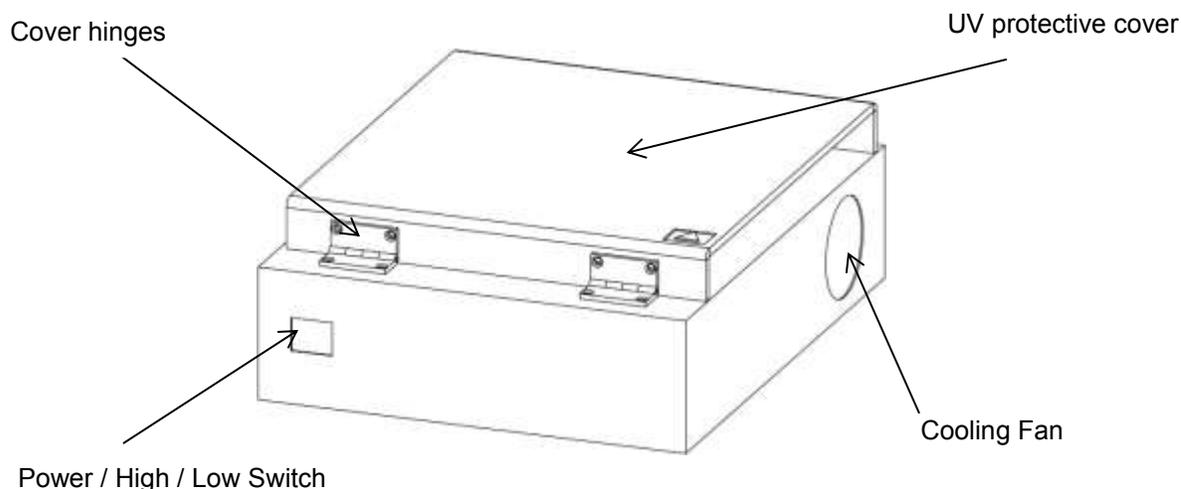
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I. Overview

The Accuris E3000 UV Transilluminator is a laboratory instrument designed to produce a uniform source of UV light for the excitation of fluorescent dyes such as Ethidium Bromide. The E3000 is ideally suited for observation, analysis and photo imaging of stained electrophoresis gels that are positioned on the glass viewing surface.

The midrange wavelength of the E3000 Transilluminator is 302nm. Other manufacturers of transilluminators may refer to the same wavelength range as 300nm, or 312nm, but the spectral range is the same.



II. Warnings



UV Transilluminators are powerful sources of UV radiation, which is hazardous to the skin and eyes.



Always make sure the protective UV blocking cover is positioned to prevent UV exposure to the user, and wear protective clothing and protective glasses to prevent UV exposure to the skin and eyes.



Although the UV blocking cover will effectively block UV radiation, it is always recommended to wear protective UV blocking glasses.



Use caution when cutting gels on the glass surface. Although this surface is scratch resistant, use minimal pressure when working with metal blades or tools.

II. Installation

Install the E3000 Transilluminator on a level and stable surface such as laboratory counter, close to an available electrical outlet. The instrument should be oriented with the power switch and hinges facing the user. Leave sufficient space around the instrument to allow proper airflow, and take care not to block the cooling fan on the right, rear side of the housing. Make sure that the front power switch is set to the middle position (OFF), and then connect the included electrical cord to the back of the instrument and to an appropriately rated electrical outlet.

Note: The E3000 is available in 2 versions, for input voltage of 110V or 230V. Check the rating plate on the rear housing to confirm use of the correct input voltage.

III. Operation

1. Place a gel or sample on the viewing surface of the transilluminator.
 2. Position the UV blocking cover to prevent exposure.
 3. Turn on power to the UV light by pressing the front switch, choosing either High or Low Intensity.
 4. Note: Low intensity (50%) is used for preparation, positioning or longer term exposure of the sample and will prevent excessive UV damage.
 5. High intensity (100%) will maximize excitation of the fluorescing dye, and can be used for photography or visualization of small quantities of sample.
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IV. Imaging using the Accuris SmartDoc™

To image gels on the E3000 Transilluminator, it is recommended to use an imaging enclosure.

The Accuris SmartDoc™ enclosure, for photos using a smart phone camera, is designed to fit the viewing surface of the E3000. Filters are available for blocking the UV wavelength to allow image capture with minimal background fluorescence.



V. Specifications

| | |
|-------------------------|--------------------------|
| Light Source | UV, 8W bulbs |
| Transmission wavelength | 302nm |
| Gel Viewing Surface | 160x190mm |
| Dimensions | 265 x 325 x 140mm |
| Input voltage | 110V ± 10% or 230V ± 10% |
| Frequency | 50/60Hz |

VI. Cleaning and Care

The glass surface should be cleaned regularly with a cloth dampened with water, a mild soap solution, or ethanol.

In order to extend the working life of light tubes and UV glass filter, power off the instrument when not in use.

For service, contact Benchmark Scientific's Service Department at 908-769-5555



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