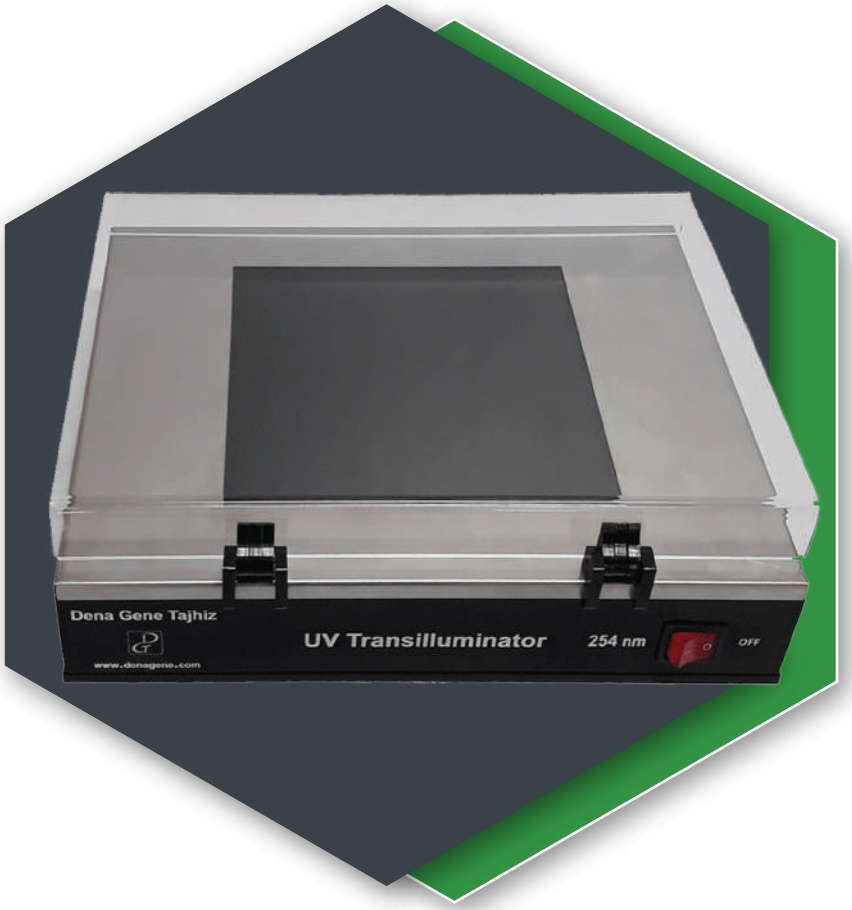
UV Transilluminator User Guide

Denagene Tajhiz Company

Biotechnology Lab Equipment manufacturer and designer



UV Transilluminator

www.Denagene.com

Thanks for choosing Denagene Tajhiz Company's UV Transilluminator. This operation manual describes the function of the instrument. To ensure correct operation، please read the manual carefully before using it. Keep this manual for future reference in case you encounter any difficulties. Upon unpacking for the first time، please verify the instrument and accessories against the packing list. If anything does not match، please get in touch with us.

This manual serves as a valuable resource for all users of our products، whether you are a seasoned professional or just starting your scientific journey. It has been meticulously crafted to help you clearly understand the features، functionality، and proper usage of our laboratory equipment.

Within these pages، you will find detailed instructions، diagrams، and troubleshooting guides to assist you in harnessing the full potential of our products. We have organized the content logically، making it easy for you to navigate through the manual and quickly locate the information you need.

Moreover، this manual is a living document that reflects our ongoing commitment to excellence. As we continue to develop and improve our product offerings، we will provide updates and revisions to this manual to ensure you always have the most current information at your fingertips.

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Content

Introduction

After completing the electrophoresis process، it is necessary to examine the results related to DNA bands. The transilluminator apparatus is the simplest method for visualizing DNA bands. Usually، during the electrophoresis process، DNA is stained with an external fluorescent dye that is excited by a specific wavelength.

Therefore، considering the excitation wavelength of the dye used in the electrophoresis process، one can select the desired transilluminator device. To meet the needs of researchers and specialists، Denagene Tajhiz Company has designed and manufactured all models of transilluminators. Especially، the UV transilluminator models that have the most applications for detecting DNA and RNA bands.

Denagene is the designer and manufacturer of various models of UV transilluminator apparatus. In all models of UV transilluminators، a stainless body cover has been used to control UV radiation precisely.

UV Translominator

A transilluminator، also known as a UV transilluminator، is an apparatus used in molecular biology laboratories to visualize DNA and RNA bands in gel electrophoresis.

After performing the electrophoresis procedure، observing the formed bands is a crucial step for making decisions regarding the subsequent stages of research.

The simplest way to visualize these bands is by using a transilluminator device.

⚠ WARNING

⚠ Due to the hazards associated with UV light، it is essential to always place the UV radiation protective cover on the device before using it، and then proceed with observing the samples.

⚠ When using dyes for DNA staining، it is important to consider that all of them، especially ethidium bromide، have a high carcinogenic potential. Therefore، maximum safety precautions should be taken regarding their handling.

⚠ In case of any issues with the device، do not attempt any curious actions to repair it. Instead، inform the personnel of the Denagene Tajhiz Technical Team immediately for prompt assistance.

Technical Specification

Model	TRD	TRS 312	TRS 254
Wavelength	312&254 nm	312 nm	254 nm
Filter Sizes	200×200 mm	200×200 mm	200×200 mm
External dimensions (height ×width ×length)	100×300×360 mm	100×300×360 mm	100×300×360 mm
Weight	3.5kg	3.5kg	3.5kg

Set up and Installation

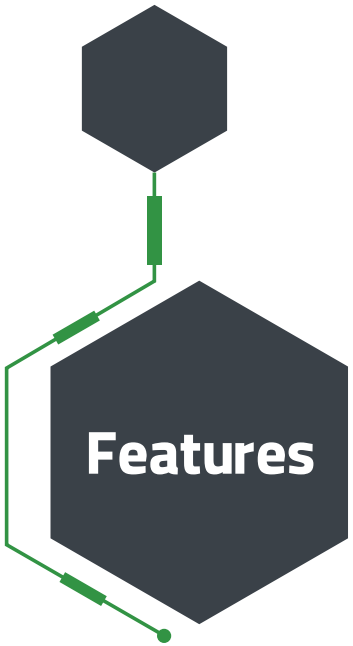
The usage of this device is extremely simple. To observe gels، first place the gel tray containing the gel onto the filter part of the device. Lower the UV radiation protective cover.

Then proceed to turn on the device. The bands will be visible.

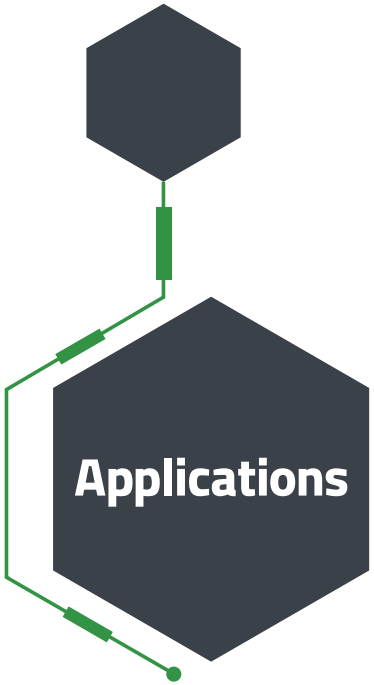
However، it is important to note that the excitation wavelength of the dye used should be in significant overlap with the emitted wavelength of the device.

Therefore، selecting the appropriate dye is of high importance.

After observing the bands، it is better to turn off the device promptly to minimize DNA damage from UV radiation exposure.



- Stainless steel body، corrosion-resistant and durable
- Equipped with UV lamp
- Uniform UV light intensity across the filter
- Possibility to order custom wavelengths
- Safe and reliable design



- Estimation of the size of DNA molecules after digestion with restriction enzymes
- Analysis of PCR products
- Genomic DNA separation before Southern blotting or RNA separation before Northern blotting

Warranty

- The transilluminator device manufactured by Denagene Tajhiz Company comes with a one-year warranty for its components.
- Breakable items and lamps are not covered by the warranty، as per common practice.
- The transilluminator device manufactured by Denagene Tajhiz Company is accompanied by 10 years of after-sales service.

Documentation and Support

To obtain support for the latest services and support information for all locations, go to:

www.Denagene.com

At the website, you can:

- Access worldwide telephone and fax numbers to contact Technical Support and Sales facilities
- Search through frequently asked questions (FAQs)
- Submit a question directly to Technical Support
- Search for user documents, SDSs, vector maps and sequences, application notes, formulations, handbooks, certificates of analysis, citations, and other product support documents
- Obtain information about customer training
- Download software updates and patches