

UV Transilluminators



Instruction Manual



"Please read this manual carefully before using the instrument"

Labnics Equipment

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CHAPTER 1. UNPACKING LIST

LUT-200A or LUT-200B or LUT-200C or LUT-200D or LUT-300A or LUT-300B or LUT-300C or LUT-300D

- 1 x UV Transilluminator LUT-200A or LUT-200B or LUT-200C or LUT-200D
- 1 x UV Transilluminator LUT-300A or LUT-300B or LUT-300C or LUT-300D
- 1 x Power cord for UV Transilluminator
- 1 x UV Transilluminator Instruction Manual

LABNICS is only responsible for all parts/accessories within 7 days after customer receives this instrument package. If any part is missing or damaged, please contact **LABNICS** immediately. If there is no response within the given time period from consignee party side, than that will be consignee party's whole responsibility.

CHAPTER 2. PACKING LIST

LUT-200A or LUT-200B or LUT-200C or LUT-200D or LUT-300A or LUT-300B or LUT-300C or LUT-300D

- 1 x UV Transilluminator LUT-200A or LUT-200B or LUT-200C or LUT-200D
- 1 x UV Transilluminator LUT-300A or LUT-300B or LUT-300C or LUT-300D
- 1 x Power cord for UV Transilluminator
- 1 x UV Transilluminator Instruction Manual

Signature:
Date

CHAPTER 3. WARNING:-

UV Transilluminator has been tested and found to comply with safety limits for the CE regulation. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, so in such a case the user will be required to correct the interference at their expense. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment. It is strongly recommended the user to read carefully the following points before this equipment is operated.

Read and follow the manual instructions carefully.

- Do not alter the equipment. Failure adhered to these directions could result in personal and/ or laboratory hazards, as well as invalidate equipment.
- Use a properly grounded electrical outlet of correct voltage and current handling capacity.
- Disconnect from power supply before maintenance and servicing. For servicing contact to a qualified personnel.
- In the event, if solution gets accidentally spilled into the hood, disconnect the grounded plug and turn the instrument upside down to avoid solution contacting the internal components. Remove cover and inspect to assure that solution has not contacted elements, thermostat or connector. Replace damaged parts.
- Do not use the instrument in presence of flammable or combustible material; as it may cause fire or explosion. This device contains components which may ignite such materials.
- For maintenance and servicing contact to a qualified personnel.
- Ensure that the system is connected to the electrical service according to local and national electrical codes. Failure to connect properly may create a fire or shock hazard.
- The unit can be operated only by qualified personnel.
- It is strongly recommended that the user must wear probable UV protection equipment while operating a UV Transilluminator.

CHAPTER 4. SAFETY INFORMATION:-

- Use high level of precautions against any electrical device. Before connecting with the electrical power supply, check if the supply voltage is within the range stated at the rating label, and the device must be earthed. Place the unit in a safe, and dry location and DO NOT touch things in the surrounding. Also do follow the safety precautions for chemicals/ dangerous materials. If needed, please contact a qualified service representative or info@labnics.com
- All bench-top Transilluminators are powerful sources of UV radiation that will cause damage to unprotected eyes and skin. So before operating the UV Transilluminator, be sure that all personnel in the area are properly protected. It is recommended that the UV Transilluminator should be installed and operated in a darkroom where access and exposure is limited while the unit is in operation. Each UV Transilluminator is shipped a UV Blocking Cover as this cover blocks the ultraviolet radiation emitted by the unit, UV Blocking Eyewear should be worn as well.

1. ENVIRONMENTAL CONDITIONS:-

- Ensure the instrument is installed and operated strictly in the following conditions:
 - 95% RH.
 - 75 KPa-106 Kpa.
 - Altitude not to exceed 2000 meters.
 - Ambient - 40°C operating temperature.

2. AVOIDING ELECTRICAL SHOCK:-

- Follow the guidelines below to ensure safe operation of the unit.
- UV Transilluminator has been designed for use with shielded wires thus minimizing any potential shock hazard to the user. **LABNICS** recommends not using the unshielded wires.

To avoid electrical shock:-

- **NEVER** connect or disconnect the wire from the power supply when the power is on.
- **WAIT** at least for 5 seconds after stopping a run before handling output leads or connected apparatus.
- **ALWAYS** make sure that hands, work area, and the instruments are clean and dry before making any connections or operating the UV transilluminator.
- **ONLY** connect the UV transilluminator to a properly grounded AC outlet.

3. AVOIDING DAMAGE TO THE INSTRUMENT:-

- Do not attempt to operate the device if damaged.
- Protect the unit from physical damage, corrosive agents and extreme temperature (direct sunlight etc).
- For proper ventilation and safety concerns, leave at least 10 cm of space behind the instrument, and at least 5 cm of space on each side.
- Do not operate the UV transilluminator in high humidity environment (> 85%), or where condensation may occur.

4. SYMBOLS:-

The symbols used on the UV Transilluminator are explained below:-



Indicates an area where a potential shock hazard may exist. Indicate a warning. Consult the manual to avoid possible personal injury or instrument damage.



Indicates a warning of UV radiation. While using the UV transilluminator, be sure that the operating personnel is properly protected.

CHAPTER 5. PRODUCT SPECIFICATIONS:-

Wavelength	254nm for LUT-200A
	312nm for LUT-200B
	365nm for LUT-200C
	254 and 365nm for LUT-200D
	254nm for LUT-300A
	312nm for LUT-300B
	365nm for LUT-300C
	254 and 365nm for LUT-300D
	Filter Size
21 x 26cm for LUV-300 Series	
EtBR Filter Equipped	LUT-200B and LUT-300B only
Light Source	8W x 6 tubes
UV Resistance Plastic Cover	330W x 250Dmm
Unit Dimension	340W x 295D x 100Hmm
Rated Voltage	110V or 220V
Weight	7.58 Kg

CHAPTER 6. PRODUCT DESCRIPTION:-

- The bench-top UV Transilluminators offers the researcher uniform and intense sources of ultraviolet light (radiation) in a compact package. Their special design emits either one or two intensity excitation UV wavelengths for back-illumination of transparent fluorescent materials.
- Key feature for the bench-top UV Transilluminators is that they can easily view gels under long wave for extended periods of time avoiding photo nicking damage. Short wave is used to irradiate samples. 2 UV models provide long wave and short wave UV. All Bench-top Transilluminator models are compact, lightweight and economical units.

CHAPTER 7. INSTALLATION INSTRUCTIONS:-

LABNICS UV Transilluminator is actually an already installed instrument. As long as it is placed on a sturdy and leveled surface in a safe and dry place, it is ready for operation.

CHAPTER 8. OPERATION INSTRUCTIONS:-

- Place the UV Transilluminator on a leveled work surface. Make sure that an air space should exist around the bottom of the work surface. This space allows the proper air circulation throughout the unit.
- Plug female end of the power cord into UV Transilluminator and plug the male end of the power cord into a properly grounded electrical outlet. The proper voltage of the transilluminator is found on the product information label.
- The UV Transilluminator comes equipped with a UV Blocking Cover. If this cover is not in place or has been removed, do not operate the unit without securing the cover. If the cover is missing, a **UV Blocking Faceshield** must be worn to avoid UV exposure to the skin. UV Blocking Eyewear should be worn even with the cover in place to avoid accidental UV exposure.
- Place gel/sample on the filter area. It is recommended to place the gels on a UV transmitting Gel tray to protect filter surface from cuts and scratches. It is recommended that gloves should be worn to avoid contact with gel and staining agents.
- Press the **ON/OFF** switch to ON. The UV tubes within the unit should be glowing beneath the filter during the start-up period.
- After viewing/photographing the sample, turn the unit off.
- Clean unit surface with a damp soft cloth or sponge. Never use abrasive cleaners (can damage the UV filter surface).

CHAPTER 9. REPLACING THE UV TUBE:-

- Disconnect the UV Transilluminator from the electrical power supply.
- A Phillips head screwdriver is required to remove the filter cover.
- Carefully twist the UV tubes from their sockets.
- Fit with the proper replacement tubes.

CHAPTER 10. MAINTENANCE :-

- The painted surfaces and filter areas of the UV Transilluminator should be cleaned with water, soap, and a sponge or cloth towel. Never use abrasive cleaners, solvent based cleaners or scouring pads.
- Always disconnect the UV Transilluminator from the electrical power prior to cleaning.

CHAPTER 11. ORDERING INFORMATION:-

Model No.	Description	Catalog No.
LUT-200A	21x21cm Transilluminator for 254nm	14380101
LUT-200B	21 x 21cm Transilluminator for 312nm	14380102
LUT-200C	21 x 21cm Transilluminator for 365nm	14380103
LUT-200D	21 x 21cm Transilluminator for 254 and 365nm	14380104
LUT-300A	21 x 26cm Transilluminators for 254nm	14380201
LUT-300B	21 x 26cm Transilluminators for 312nm	14380202
LUT-300C	21 x 26cm Transilluminators for 365nm	14380203
LUT-300D	21 x 26cm Transilluminators for 254 and 365nm	14380204

Accessories:-

Description
8W 254nm, UV lamp
8W 312nm, UV lamp
8W 365nm, UV lamp
20 x 20cm filter
UV protected cover
Starter
Ballast
Lamp holder
Starter holder
Phase controller for 70/100 intensity

CHAPTER 12. WARRANTY:-

LABNICS warrants apparatus of its manufacture against defects in materials and workmanship under normal services, **for two years from the shipping date to purchaser.** This warranty excludes damages resulting from shipping, misuse, carelessness, or negligence. **LABNICS** liability under the warranty is limited to the receipt of reasonable proof by the customer that the defect is embraced within the terms of the warranty. All claims made under this warranty must be showed to **LABNICS** within two years following the date of delivery of the product to the customer.

