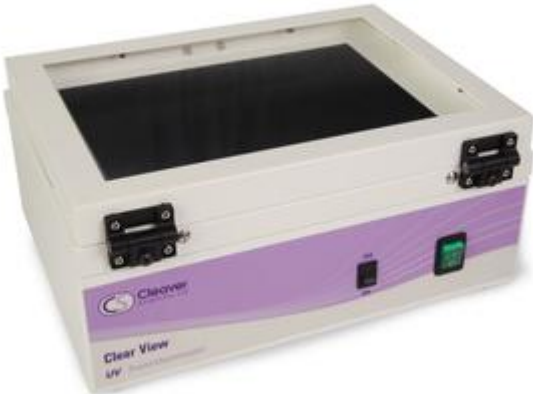


# UV Transilluminator





# UV Transilluminator

## Instruction Manual

### Catalogue Numbers

CSLUVTS254

CSLUVTS312

CSLUVTS365

CSLUVTS254L

CSLUVTS312L

CSLUVTS365L

CSLUVTSDUO

CSLUVTSDUO312

CSLUVTSDUO365

CSLUVTSDUOL

CSLUVTSDUO312L

CSLUVTSDUO365L

Record the following for your records:

Model \_\_\_\_\_

Catalogue No. \_\_\_\_\_

Date of Delivery \_\_\_\_\_

Warranty Period \_\_\_\_\_

Serial No. \_\_\_\_\_

Invoice No. \_\_\_\_\_

Purchase Order No. \_\_\_\_\_

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# Safety Information



When used correctly, these units pose no health risk. However, these units can deliver dangerous levels of electricity and are to be operated only by qualified personnel following the guidelines laid out in this instruction manual. Anyone intending to use this equipment should read the complete manual thoroughly.

These units comply with the following European directives:

***2006/95/CE Low Voltage Directive and 2014/30/UE (official Title 2004/108/EC)  
EMC Electromagnetic Compatibility***

*By virtue of the following harmonised standards:*

***BS EN IEC 61010-1: 2010 Safety Testing of Lab Equipment***

***BS EN IEC 61326-1:2013 EMC Electro Magnetic Compatibility***

## **UV Light Safety Information**

All bench top UV Transilluminators are powerful sources of UV Radiation that will cause rapid permanent damage to unprotected eyes and skin.

Before operating any unit be sure that all personnel in the area are properly protected. It is preferable that the Transilluminator is installed and operated in a dark room where access and exposure is limited while the unit is in operation.

Each CSL Transilluminator is shipped complete with a blocking cover.

However even when this cover is being used, UV protection should also be worn as well as an extra safety precaution.

# Packing List

	Main Unit	Mains Lead	Acrylic Cover	Instruction Manual
CSLUVTS254				
CSLUVTS312				
CSLUVTS365				
CSLUVTS254L				
CSLUVTS312L				
CSLUVTS365L				
CSLUVTSDUO				
CSLUVTSDUO312				
CSLUVTSDUO365				
CSLUVTSDUOL				
CSLUVTSDUO312L				
CSLUVTSDUO365L				

Packing List Checked by: \_\_\_\_\_

Date: \_\_\_\_\_

**The packing lists should be referred to as soon as the units are received to ensure that all components have been included. The unit should be checked for damage when received.**

**Cleaver Scientific is liable for all missing or damaged parts / accessories within 7 days after customer received this instrument package. Please contact Cleaver Scientific immediately regarding this issue. If no response within such period from consignee party, that will be consignee party's whole responsibility.**

**Please contact your supplier if there are any problems or missing items.**

# Specifications

<b>Model</b>	<b>Input Voltage</b>	<b>Wavelength</b>	<b>Filter Size</b>	<b>No. of Tubes</b>	<b>Intensity % Option</b>
<b>CSLUVTS254</b>	110 / 220V	254 nm	21 x 21 cm	6 x 8W	70 / 100
<b>CSLUVTS312</b>	110 / 220V	312 nm	21 x 21 cm	6 x 8W	70 / 100
<b>CSLUVTS365</b>	110 / 220V	365 nm	21 x 21 cm	6 x 8W	70 / 100
<b>CSLUVTS254L</b>	110 / 220V	254 nm	21 x 26 cm	6 x 8W	70 / 100
<b>CSLUVTS312L</b>	110 / 220V	312 nm	21 x 26 cm	6 x 8W	70 / 100
<b>CSLUVTS365L</b>	110 / 220V	365 nm	21 x 26 cm	6 x 8W	70 / 100
<b>CSLUVTSDUO</b>	110 / 220V	254 & 365 nm	21 x 21 cm	6 x 8W	100
<b>CSLUVTSDUO312</b>	110 / 220V	254 & 312 nm	21 x 21 cm	6 x 8W	100
<b>CSLUVTSDUO365</b>	110 / 220V	312 & 365 nm	21 x 21 cm	6 x 8W	100
<b>CSLUVTSDUOL</b>	110 / 220V	254 & 365 nm	21 x 26 cm	6 x 8W	100
<b>CSLUVTSDUO312L</b>	110 / 220V	254 & 312 nm	21 x 26 cm	6 x 8W	100
<b>CSLUVTSDUO365L</b>	110 / 220V	312 & 365 nm	21 x 26 cm	6 x 8W	100



# Operating Instructions

Further information regarding setting up and running the transilluminator units can be found at [www.cleaverscientific.com](http://www.cleaverscientific.com)

## Usage Guidance and restrictions

- Maximum altitude 2,000m.
- Temperature range between 4°C and 65°C.
- Maximum relative humidity 80% for temperatures up to 31°C decreasing linearly to 50% relative humidity at 40°C.
- Not for outdoor Use.

This apparatus is rated POLLUTION DEGREE 2 in accordance with IEC 664.

POLLUTION DEGREE 2, states that: "Normally only non-conductive pollution occurs.

Occasionally, however, a temporary conductivity caused by condensation must be expected".

## Installation

1. Place the Transilluminator on the bench surface ensuring that none of the ventilation ducts are obscured.
2. Ensure that the switch at the front of the unit is in the off position and that the cover is closed and all personnel in the vicinity are wearing the appropriate protective clothing.
3. Connect the power cord to the Transilluminator and to a properly grounded electrical outlet of the correct voltage. The compatible voltage is indicated at the back of the power supply. If this is not the same as the electricity supply you are using, please contact your supplier, the Transilluminator cannot be used at the incorrect voltage.
4. The Transilluminator can now be turned on and used.

## Operation

1. The gel or sample can be placed on the UV Filter area. It is recommended to use a UV transparent gel tray. All CSL gel trays are UV Transparent. Gloves should be worn to avoid contact with gel and stains.

2. Switch to the appropriate setting for your application. The Low setting should be used for cloning to prevent DNA damage.

# Care and Maintenance

## **Cleaning UV transilluminator Units**

Units are best cleaned using warm water and a mild detergent and a soft sponge or cloth towel.

**The units should never come into contact with the following cleaning agents, these will cause irreversible and accumulative damage:**

Acetone, Phenol, Chloroform, Carbon tetrachloride, Methanol, Ethanol, Isopropyl alcohol, Alkalis.

**DO NOT** use abrasive creams or scourers.

Components should always be dried with clean tissues prior to use.

## **Replacing the UV Lamps**

Disconnect the Transilluminator from the electrical supply.

A Philips head screwdriver is required to remove the filter cover.

Carefully twist the UV tubes from their sockets.

Fit with the proper replacement tubes.

**CAUTION: The lamps become very hot during use.**

**Make sure that the lamps have cooled down before removing them.**

# Ordering information

<b>Catalogue No.</b>	<b>Product description</b>
<b>CSLUVTS254</b>	UV Transilluminator small, 21 x 21 cm, 254 nm
<b>CSLUVTS312</b>	UV Transilluminator small, 21 x 21 cm, 312 nm
<b>CSLUVTS365</b>	UV Transilluminator small, 21 x 21 cm, 365 nm
<b>CSLUVTS254L</b>	UV Transilluminator large, 26x 21 cm, 254nm
<b>CSLUVTS312L</b>	UV Transilluminator large, 26 x 21 cm, 312nm
<b>CSLUVTS365L</b>	UV Transilluminator large, 26 x 21 cm, 365nm
<b>CSLUVTSDUO</b>	UV Transilluminator small, 21 x 21 cm, 254/365 nm
<b>CSLUVTSDUO312</b>	UV Transilluminator small, 21 x 21 cm, 254/312 nm
<b>CSLUVTSDUO365</b>	UV Transilluminator small, 21 x 21 cm, 312/365 nm
<b>CSLUVTSDUOL</b>	UV Transilluminator large, 26x 21 cm, 254/365nm
<b>CSLUVTSDUO312L</b>	UV Transilluminator large, 26x 21 cm, 254/312nm
<b>CSLUVTSDUO365L</b>	UV Transilluminator large, 26 x 21 cm, 312/365 nm
<b>CSL-T254</b>	8W 254 nm UV lamp
<b>CSL-T312</b>	8W 312 nm UV lamp
<b>CSL-T365</b>	8W 365 nm UV lamp
<b>CSL-F</b>	20 x 20 cm filter
<b>CSL-C</b>	UV protected cover

# Warranty

The Cleaver Scientific Ltd. UV Transilluminator units have a warranty against manufacturing and material faults of twelve months from date of customer receipt.

If any defects occur during this warranty period, CSL will repair or replace the defective parts free of charge.

This warranty does not cover defects occurring by accident or misuse or defects caused by improper operation.

Units where repair or modification has been performed by anyone other than CSL or an appointed distributor or representative are no longer under warranty from the time the unit was modified.

Units which have accessories or repaired parts not supplied by CSL or its associated distributors have invalidated warranty.

CSL cannot repair or replace free of charge units where improper solutions or chemicals have been used. For a list of these please see the Care and Maintenance subsection.

If a problem does occur, then please contact your supplier or Cleaver Scientific Ltd:

Cleaver Scientific Ltd.

Unit 41, Somers Road Industrial Estate

Rugby, Warwickshire, CV22 7DH

Tel: +44 (0)1788 565300

Email: [info@cleaverscientific.com](mailto:info@cleaverscientific.com)





