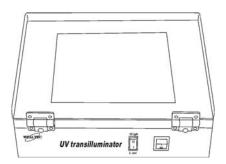


# **UV** transilluminator

# Installation and operation instruction manual

V 2.0



\*This instrument is intended for laboratory use only

Warning: Do not turn on the system until carefully read this instruction manual. Improper operation may cause serious hazards.

# <u>Index</u>

C.	Installation of UV transilluminator	4
C.		4
	Package List Installation	
	Unpacking	
	Installation	
D.	Operation	5
_	Care and Maintenance	F
E.	Care and Maintenance	5
	General Maintenance	
	Service Maintenance	
	Lamps Replacement	
	Fuses Replacement	
	UV-Blocking Cover Replacement	
F.	Trouble Shooting	7

## A. Important Notice

The instrument is designed for laboratory use only.

Before setting up and operating the instruments of UV transilluminator, please carefully read these instructions to get familiarized with all installations and operation process. Instructions should be read by well- trained individuals or by technical people from Wealtec Corp. before operating the instruments.

Any improper usage may cause damage both to the instrument and operator, please refer to below safety notice.

The instruments shall not be modified or altered in any way. Any modification or alteration will void the warranty, void the regulatory certifications and create potential safety hazard. Wealtec is not responsible for any injury or damage caused by using the instruments for any non-intended purpose or by modifying the instruments by any person who is not authorized by Wealtec Corp.

## **Warranty**

UV transilluminator is warranted to be free from defects in materials or workmanship for a period of one year from the original invoice date, under normal usage. Any defects occurring during warranty period, Wealtec Corp. will repair or replace defective products or parts without charge unless the defects arising from below conditions. The defects described below are specially excluded from Wealtec warranty policy.

- 1. Improper operation of the instrument.
- Repair or modification by any person who is not authorized by Wealtec Corp.
- 3. Damage caused by any (in)-direct accident, neglect, or misuse.
- 4. Damage caused by disaster.
- Damage caused by any improper solvents or samples

## **Technical and Service Contact**

Most of the operation details are described in this instruction manual and operator can find appropriate solutions according to these instructions. For any other technical/ service questions, please contact your local representative or contact Wealtec international technical/ service specialist by E-mail: support@wealtec.com.

### **Safety Notice**

### Certification

Wealtec UV transilluminator is designed to meet the international electrical safety standard EN61010 and EMC regulations. This product holds CE marking and operation is according to the guidance of its instruction manual certificated safe. Any modification or alteration will void the warranty, void the regulatory certifications and create potential safety hazard.



### **Safety Information**



UV transilluminator using UV illumination for sample visualization. UV-radiation can be hazardous without safe and proper operation. The operator shall be aware of the UV radiation health risks and familiar with chemicals reagents to be used. Protective clothing and eye/face wear is recommended. Unless you are under proper protection, do not operate the unit without UV-blocking cover installed.

### **B.** Introduction

## **Specifications**

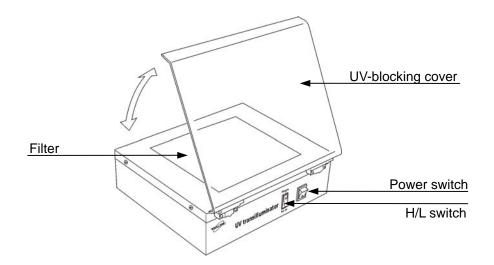
Filter size	20x20/25x25 cm
Filter type	Long-life filter
Wavelength	312/365 nm
No. of tubes	6
Tube power	8w
Intensity	Dual, H/L
Cover frame material	Stainless steel
UV-blocking cover	Yes
Power	100/120/230V, 50-60Hz
Dimensions (WxLxH)	32x28x9 cm
Weight	7.4 kg
Operating conditions	Temperature : 0-40°C
	Humidity:10% to 90% R.H.
	Non-condensing
Certification	CE

### **Product Description**

UV transilluminator is a basic device for visualizing fluorescence-stained gels. Wealtec offers 312nm and 365nm wavelength UV transilluminators with 20x20 or 25x25 cm filter size for different requirements. H/L dual intensity offers best conditions for both gel excision and gel-visualizing applications. The stainless steel frame prevents any possible UV light leakage and the UV-blocking cover fully protects user from UV light exposure during operation.

### Individual functional descriptions -

- a. On/Off: Power switch is located at the front of the instrument. When power is turned on, the UV lamps will be on. Operator shall connect the instrument to correct voltage source as indicated on the label of instrument.
- b. Power cord inlet: The inlet for the power cord is located at the backside of the UV transilluminator.
- c. H/L switch: Located at the front of the instrument. Switch to "High" for high intensity and switch to "Low" for low intensity.
- d. UV-blocking cover: A protection cover to block UV-light. Operator shall close the cover before turning on the power unless people surrounded are under proper protection.



## C. Installation of UV transilluminator

## **Package List**

Item	Quantity
UV transilluminator main body	1
Power cable	1
UV-blocking cover	1
Installation and operation instruction manual	1

## **Installation**

## **Unpacking**

- 1. Carefully remove the UV transilluminator out of the package box and place it at a stable, suitable place.
- 2. Make sure the unit is under good condition and without damage. Any damaged inspected, immediately contact with your supplier. Do not operate the unit under damaged conditions.
- 3. Save the shipping and packing materials for future storing and shipping if necessary.

#### Installation

- 1. Place the unit on a stable, horizontal surface without any obstacles and with good aeration.
- 2. Make sure the electrical requirements specified on the unit are available.
- 3. Plug power cable provided to a power outlet. Do not use other power cables except UV transilluminator's standard package.

## D. Operation

- 1. The power of the unit should be turned off.
- 2. Open the UV-blocking cover to desired angle.
- 3. Place the sample on the filter surface.
- Close the UV-blocking cover or make sure people surrounded are under proper protection.
- 5. Press the switch "power ON/OFF" to turn on the unit. The tubes should become energized and emit a steady glow of light. The light may initially flicker, especially if the lamp is cold, but should stabilize after a few seconds.
- 6. Press "high/low switch" for preferred intensity to visualize. If you need high intensity of UV radiation, then press the switch to "high" for high intensity. (Note: Do not press the switch subito up and down.)
- 7. Visualize or capture image by imaging system or any camera available. (Note: Do not keep the UV transilluminator on for a long period of time, it may reduce filter and UV tube's lifetime. Long time UV exposure may also cause damaged to sample.)
- 8. Turn off the unit before remove the sample.
- 9. Clean the sample touched surface with soft tissue.

### E. Care and Maintenance

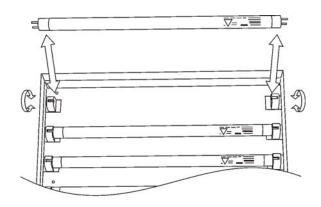
## **General Maintenance**

Sample touched surface of UV transilluminator should be cleaned by moisten soft tissues after every usage to avoid all possible contaminations and damages of instruments. Do not use abrasive detergent, it could damage the filter and decrease its lifetime.

## **Service Maintenance**

## **Lamp Replacement**

- 1. Remove the power cable.
- 2. Screw out the screws located at front and rear side of the unit.
- 3. Remove lamp by rotating count clockwise.
- 4. Insert new lamp into the holder and rotate clockwise.
- 5. Reassembly

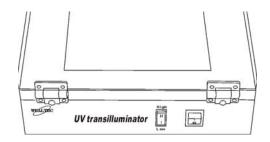


## Fuse Replacement

- 1. Remove the power cable.
- 2. Unscrew the plastic screws of the fuse holder with a Philip screw driver.
- 3. Replace the fuses.
- 4. Retighten the fuse holder screws.

## **UV-Blocking Cover Replacement**

- 1. Unscrew the four upside screws of the step-holding hinge
- 2. Replace the UV-blocking cover
- 3. Screw back all the screws



# F. Trouble Shooting

	Symptom		Solution
1.	UV lamps did not light up after switch ON	1.	Make sure power cable is connected properly
		2.	Make sure power source is normal.
		3.	Refer to "Fuse replacement" procedures to replace a new fuse.
		4.	Call local Wealtec representatives.
2.	Some UV lamps did not light up after switch ON	1.	Refer to "Lamp Replacement" procedures to replace lamps or starter
		2.	Call local Wealtec representatives.
3.	Some UV lamps flashes after switch ON	1.	Wait a few minutes to stabilize UV light
		2.	Refer to "Lamp Replacement" procedures to replace lamps.

# **G.** Order Information

ltem #	Description
1142001	MD-20 UV transilluminator, 312 nm, 20x20 cm size, 120V
1142002	MD-20 UV transilluminator, 312 nm, 20x20 cm size, 230V
1142003	MD-25 UV transilluminator, 312 nm, 25x25 cm size, 120V
1142004	MD-25 UV transilluminator, 312 nm, 25x25 cm size, 230V
1142005	MD-20 UV transilluminator, 312 nm, 20x20 cm size, 100V
1142006	MD-25 UV transilluminator, 312 nm, 25x25 cm size, 100V
1142007	HD-20 UV transilluminator, 365 nm, 20x20 cm size, 120V
1142008	HD-20 UV transilluminator, 365 nm, 20x20 cm size, 230V
1142009	HD-25 UV transilluminator, 365 nm, 25x25 cm size, 120V
1142010	HD-25 UV transilluminator, 365 nm, 25x25 cm size, 230V
1142011	HD-20 UV transilluminator, 365 nm, 20x20 cm size, 100V
1142012	HD-25 UV transilluminator, 365 nm, 25x25 cm size, 100V
1142101	8W M-UV lamp
1142104	M-UV filter, 20x20cm
1142105	M-UV filter, 25x25cm
1142110	UV-blocking cover
1142111	Starter
1142112	Hinge for UV tables
E300004	3A 250V 20mm Fuse



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