

UVP Visi-Blue™ Transilluminators

Instruction Manual



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Introduction

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UVP Visi-Blue™ Transilluminators convert 365nm UV to 460-470nm blue light, emitting no harmful UV energy. Visi-Blue Transilluminators are designed for use with GelStar®, GFP, SYBR® green, Vistra Green, SYPRO® Orange and Ethidium Bromide stains. As compared to UV, the blue light can transmit through almost any transparent laboratory equipment (plastic, glass, acrylic, etc.). This is essential when monitoring and detecting DNA migration and protein expression in “real time.” When used in imaging applications, use the proper emission filter to eliminate/reduce the background.

The amber colored cover blocks blue light transmission and allows visualization of all media above 500nm.

Visi-Blue Transilluminators feature:



Specifications

UVP Visi-Blue Transilluminators are designed with **variable intensity settings**. Units are equipped with an electronic ballast. This manual covers the VB-26V and VB-40V models.

VB-26V Dimensions: 14"W x 11"D x 4.8"H (356 x 279 x 122mm) Height includes cover

VB-40V Dimensions: 19.13" W x 13.25" D x 5.63" H (486 x 337 x 143mm) Height includes cover

<i>Model</i>	<i>Part Number</i>	<i>Wave-length</i>	<i>Volts/Hz</i>	<i>Filter Size</i>	<i>No. of Tubes</i>	<i>Intensity Style</i>
VB-26V	95-0461-01	460-470nm	100-115V/60Hz	21 x 26cm	4 x 8W	Variable
VB-26V	95-0461-02	460-470nm	230V/60Hz	21 x 26cm	4 x 8W	Variable
VB-40V	95-0433-01	460-470nm	100-115V/60Hz	20 x 40 cm	4 x 25W	Variable
VB-40V	95-0433-02	460-470nm	230V/60Hz	20 x 40 cm	4 x 25W	Variable

Transilluminator Operation

Set Up

- Place the transilluminator on a level work surface. Be sure that an air space exists around the bottom of the work surface. This space allows for proper air circulation through the unit.
- Plug the female end of the power cord into the transilluminator. For 230 volt models, or those requiring special power cord connectors, ensure that the proper configuration of male connector or plug is properly connected to the power cord.
- 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 transilluminator may be equipped with a background-blocking amber cover. Remove the brown protective paper from the cover. Insert the bracket pins on the cover into the holes on the front of the transilluminator. The cover is adjustable to varying angles for access to the filter surface.

Permanently Installing the Amber Cover *(Optional)*

Your UVP transilluminator includes a background-blocking amber cover which can be installed temporarily (as described elsewhere in this manual) or permanently, if desired. The following instructions will explain the process of permanently installing the Analytik Jena-supplied amber cover onto the UVP transilluminator.

To complete this procedure, the following tools and parts will be required:

- Phillips-head screwdriver
- 5/16" nut driver
- 3/8" narrow walled nut driver
- (4) hollow 3/8" nuts (supplied with amber cover)

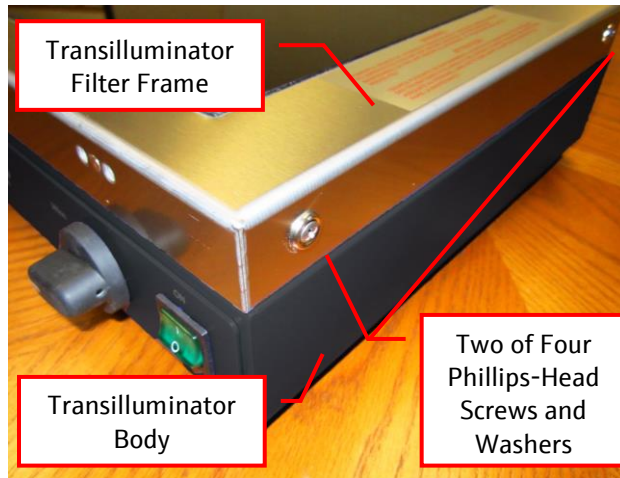
CAUTION: This procedure requires a moderate level of technical competence. If you are not comfortable working with electronics, tools and/or related components, contact AJ for assistance.

Note: The transilluminator images shown in this procedure may differ in appearance from your transilluminator. However, the procedure is the same.

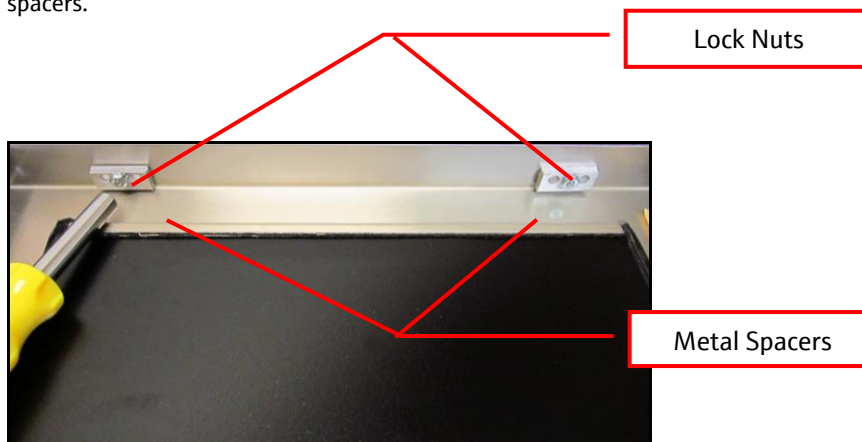
Removal Procedure

When performing the following procedure, place all components (screws, nuts, etc.) in a secure location, as some will be reused for installation.

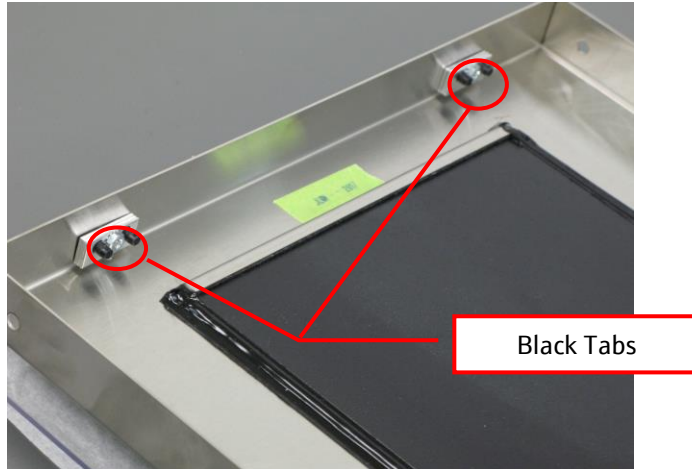
1. Turn off the transilluminator by placing the power switch on the front of the unit in the OFF position. Then, unplug the unit from the wall power.
2. Remove the four Phillips-head screws and washers securing the transilluminator filter frame to the body of the transilluminator. Lifting up, remove the transilluminator filter frame from the transilluminator body and place it upside-down on a flat, smooth surface to avoid scratching the filter glass.



3. Locate the two sets of lock nuts and three metal spacers on the inside of the transilluminator filter frame, as shown in the image below. Use the 5/16" nut driver to remove the two sets of lock nuts and spacers.



4. Lift the transilluminator filter frame and place the amber cover below the frame. Insert the black tabs, located on the amber cover's hinges, through the filter frame as shown.



5. Use the narrow walled 3/8" nut driver to secure the four supplied 3/8" hollow nuts to the amber cover hinge tabs.



Installation Procedure

1. With the amber cover hinges at the front of the unit, replace the transilluminator filter frame on top of the body of the transilluminator.



2. Reinstall the four Phillips-head screws and washers on the sides of the transilluminator to secure the transilluminator filter frame to the transilluminator body.



Using the Transilluminator

Place gel/sample on the filter area. It is recommended to place the gels on a Gel-Tray to protect the filter surface from cuts and scratches. It is recommended that gloves be worn to prevent contact with gel and staining agents.

Press the ON/OFF switch to ON. The light tubes within the unit will glow beneath the filter.

Use the variable intensity settings as follows:

- **High:** Allows for excitation of fluorophores on gels for routine photography and for excitation of gels with low sample concentration
- **Medium:** Excellent for viewing and quick single-band excision
- **Low:** Allows for positioning and preparation of gels, excising multiple bands and focusing for photography

After viewing/photographing the sample, turn the transilluminator off.

Cleaning and Care of the Transilluminator

Clean unit surface with a damp soft cloth or sponge. Never use abrasive cleaners which can damage the filter surface.

To protect the filter glass and minimize moisture and liquids on the glass, it is recommended to use a Gel-Tray. Refer to the Replacement Parts for ordering information.

Replacing Tubes in the Transilluminator

1. Disconnect the transilluminator from the electrical supply.
2. Remove the filter cover: Use a Phillips head screwdriver to remove the four screws on the sides of the unit. Lift the filter cover off the unit.

NOTE: When powered on, the light tubes within the UVP Visi-Blue transilluminators emit longwave UV (365nm). These tubes are a powerful source of UV radiation that will cause damage to unprotected eyes and skin. As a result, Visi-Blue transilluminators should **NOT** be operated when the filter cover is removed!

3. Remove the reflectors on the left and right sides of the unit. Slide the reflectors up out of the unit.
4. Remove the tube: Carefully rotate the tube 90° and slide out of the socket. Replace with a new tube by sliding the tube into the socket and rotating 90° into place.
5. Insert the reflectors back into place and reattach the filter cover.

Maintenance/Repair/Technical Assistance

Replacement Parts/Accessories

For replacement parts or components not shown here, call Analytik Jena Customer Service or place of purchase. Have the transilluminator model number available when you call.

Replacement Part Description	Part Number
Filter Assembly (VB-26V)	38-0313-06
Filter Assembly (VB-40V)	38-0215-01
Cover, Amber (VB-26V)	19-0170-04
Cover, Amber (VB-40V)	19-0171-02
UVP Tube, 8 Watt, 365nm UV (VB-26V)	34-0031-01 (Qty. 4 Required)
UVP Tube, 25 Watt, 365nm UV (VB-40V)	34-0060-01 (Qty. 4 Required)

Accessories Description	Part Number
UVP Gel-Ruler, UV Fluorescing	85-0003-01
UVP Gel-Cutter	85-0002-01
UVP Gel-Scooper	85-0006-01
UVP Gel-Tray, UV Transmitting, Sm. 11.5"W x 9"D (29 x 23cm)	85-0007-01
UVP Gel-Tray, UV Transmitting, Lg. 16.5"W x 10.5"D (42 x 27cm)	85-0005-01

Technical Support

Note: A **Returned Goods Authorization (RGA) number** must be obtained from AJ Customer Service before returning any product.

AJ offers free lifetime technical support on all of its products. Should you have any questions regarding the product's use, operation or repair, contact AJ's offices at the locations below, or visit www.us.analytik-jena.com.

If you are in North America, South America, East Asia or Australia:	If you are in Europe, Africa, the Middle East of Western Asia:
Call (909) 946-3197 , and ask for Customer Service during regular business days, between 7:00 am and 5:00 pm, PST.	Call +44(0) 1223-420022 , and ask for Customer Service during regular business days between 9:00 am and 5:30 pm.
E-mail your message to: info@us.analytik-jena.com	E-mail your message to: uvp@uvp.co.uk
Fax Customer Service, and send it to (909) 946-3597	Fax Customer Service, and send it to: +44(0) 1223-420561
Write to: Analytik Jena US 2066 W. 11 th Street, Upland, CA 91786 USA	Write to: Ultra-Violet Products Ltd Unit 1, Trinity Hall Farm Estate, Nuffield Road, Cambridge CB4 1TG UK

Warranty

Analytik Jena warrants its Ultraviolet Transilluminators to be free of defects in materials and workmanship for a period of two (2) years from date of purchase. The foregoing warranty of AJ shall be of no force and effect if buyer has modified or damaged the product. Tubes and filters are warranted for 90 days.

All warranties or merchantability and fitness for any purpose and all other warranties, expressed or implied, except those expressly set forth herein, are deemed waived and excluded.

AJ's duty under the warranty is limited to replacement and/or repair of the defective part at the option of AJ. AJ shall not be liable for any expenses or damages incurred by the purchaser except as expressly set forth herein, and in no event shall AJ be liable for any special, incidental or consequential damages of any kind. This warranty does not supersede any statutory rights that may be available in certain countries.