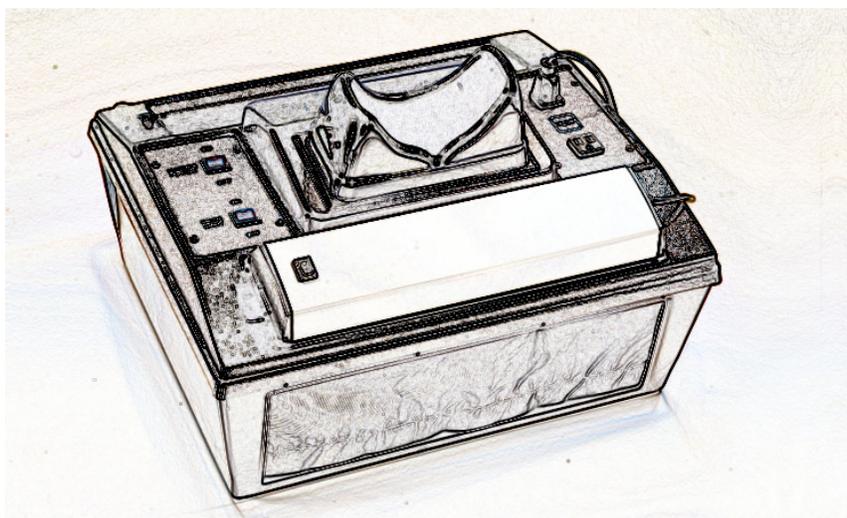


Chromato-Vue[®] Viewing Cabinets

C-65, C-75, C-70G and C-71 Models

Operating Instructions



WARNING: Do not expose eyes and skin to shortwave ultraviolet radiation as rays may be harmful to unprotected eyes and skin.



UVP, LLC 2066 W. 11th Street
Upland, CA 91786
Tel: (800) 452-6788 • (909) 946-3197
Fax: (909) 946-3597

Ultra-Violet Products Ltd.
Unit 1, Trinity Hall Estate, Nuffield Rd.
Cambridge, CB4 1TG UK | Tel: +44(0)1223-420022
Fax: +44(0)1223-420561

Web Site: www.uvp.com

Chromato-Vue is a registered trademark of UVP, LLC

81-0142-01 Rev E

CONTENTS

Introduction	3
Operating Instructions	3
Features and Specifications	3
C-65	3
C-75	5
C-70G and C-71	5
Safety Precautions	7
General Maintenance	7
Accessories	8
Warranty	8

Introduction

The UVP Chromato-Vue Viewing Cabinets provide a wide range of cabinet models and ultraviolet wavelength configurations for use in laboratory or industrial applications. This Operations Manual covers the following cabinet models: C-65, C-75, C-70G and C-71. These cabinets are designed for long life and rugged use in a wide range of applications. The bottom panel of each cabinet is removable and the cabinet can be placed over samples or a transilluminator. The lightweight access curtain allows for easy entry and blocks out external light. All cabinets are manufactured of durable lightweight plastic. The view port combines a comfortable soft rubber, which can accommodate eyeglasses, and a contrast control filter, which blocks the ultraviolet radiation.

The C-65 comes with a built-in white light. Ultraviolet lamps for use with this cabinet are purchased separately. Other models mentioned above are fitted with ultraviolet light sources. Further information is provided below on each model.

Operating Instructions

Materials shipped may include the following products wrapped individually: cabinet, eyepiece, bottom panel, and contrast control filter. To remove shipping material from inside of cabinet, raise curtain by the lever on side of cabinet. Unwrap bottom panel and insert into cabinet. The rolled edge of the panel should face down in front. Place unwrapped contrast control filter into the open area on cabinet top. The unwrapped eyepiece should be placed over the rim of the cabinet opening so that the nose notch faces forward.

Plug the power cord of the cabinet into a convenient wall receptacle. Cabinet is now ready for viewing. Lamp control panel is located at the top right of cabinet. Use the rocker switch for illumination control. If a transilluminator is to be used with your Chromato-Vue Cabinet, remove the bottom panel from inside the cabinet and then place the cabinet over the transilluminator.

Warning: Because of the potential ultraviolet radiation hazard inherent from the shortwave ultraviolet models, please read Safety Precautions before using this equipment.

Features and Specifications

C-65 Chromato-Vue Cabinet

The C-65 Cabinet provides a built-in overhead white light. The ultraviolet light source is provided by the EL Series Ultraviolet Lamps. Using two lamps gives even illumination from two sides of the cabinet. Each lamp utilizes 8-watt dual bipin tubes. The lamp is plugged into the service outlet located on top of the cabinet and the lamp is placed over the cabinet opening with the filter glass facing into the cabinet. A rocker switch is located on the back of the lamp for lamp operation. The cabinet master ON/OFF rocker switch must be ON to operate the white light and service outlets. See Accessories for optional equipment for use with the C-65.

Model	Part Number	Voltage
C-65	95-0257-01	115V, 60Hz, .9A max.
C-65	95-0257-02	230V, 50Hz, .80A max.

Cabinet dimensions

Exterior: 19.75"L x 16.5"W x 13.25"H (502 x 419 x 337mm)

Interior: 17"L x 14"W x 6"H (432 x 356 x 127mm)

Wiring Diagram

Contact UVP's customer service department for schematic diagrams.

EL Series Lamps for the C-65

EL Lamps are designed for use with the cabinet or handheld. Refer to EL Lamp User's Guide for additional lamp specifications. EL Series Lamps for use with the C-65 Cabinet are shown below:

Model	Part Number 115V/60Hz	Part Number 230V, 50Hz	Wavelength/ No. of tubes
UVS-18	95-0200-01	95-0200-02	254nm, white/1 ea.
UVL-18	95-0198-01	95-0198-02	365nm, white/1 ea.
UVM-18	95-0199-01	95-0199-02	302nm, white/1 ea.
UVS-28	95-0249-01	95-0249-02	254nm/2
UVL-28	95-0248-01	95-0248-02	365nm/2
UVM-28	95-0250-01	95-0250-02	302nm/2
UVLS-28	95-0201-01	95-0201-02	365, 254nm/1 ea.
UVLM-28	95-0251-01	95-0251-02	365, 302nm/1 ea.
UVLMS-38	95-0252-01	95-0252-02	365, 302, 254nm/1 ea.

Replacement Parts

Replacement parts for the C-65 and EL Lamps may be ordered through your local distributor. It is important when ordering parts to include the part number and model number of the cabinet.

Part Number	Description
23-0036-01	Eyepiece, Molded Plastic
23-0040-01	Eyepiece, Viewing
34-0002-01	Lamp, Incandescent, 25 watt, 115V
34-0040-01	Lamp, Incandescent, 10 watt, 230V
34-0007-01	Tube, 8 watt, 254nm, for EL Series Lamps
34-0006-01	Tube, 8 watt, 365nm, for EL Series Lamps
34-0042-01	Tube, 8 watt, 302nm, for EL Series Lamps
53-0126-03	Switch, Rocker, On/Off
56-0023-02	Fuse Holder, 15A
56-0002-04	Fuse, 1Amp

Model C-75 Chromato-Vue Cabinet

The C-75 provides a wide area of illumination from the 15-watt shortwave and longwave tubes positioned on two sides of the cabinet interior. The C-75's internal white light is operated by the rocker switch located on top of the cabinet. Rocker switches also control the UV light source. See Accessories section for optional equipment for use with the Model C-75.

Model	Part Number	Voltage
C-75	95-0253-01	115V, 60Hz
C-75	95-0253-02	230V, 50Hz

Cabinet dimensions

Exterior: 19.75"L x 16.5"W x 15.75"H (502 x 419 x 400mm)

Interior: 17"L x 14"W x 6"H (432 x 356 x 127mm)

Wiring Diagram

Contact UVP's customer service department for schematic diagrams.

Replacement Parts

Replacement parts for the C-75 may be ordered from UVP through your local distributor. It is important when ordering parts to include the part number and model number of the cabinet.

Part Number	Description
16-0117-01	Reflector, Lamp
23-0036-01	Eyepiece, Molded Plastic
23-0040-01	Eyepiece, Viewing
34-0008-01	Tube, 254nm, 15Watt
34-0009-02	Tube, 365nm, 15Watt
34-0066-01	Lamp, Cool White, 4Watt
38-0010-03	Filter, Glass, LW
38-0013-01	Filter, Contrast Control
38-0108-01	Filter, Shortwave
42-0001-01	Ballast, 15Watt Tubes
42-0005-01	Ballast, 4Watt Lamp
53-0126-03	Switch, Rocker, On/Off
53-0022-02	Fuse
53-0023-02	Fuse Holder

Model C-70G and C-71 Cabinets

The C-70G and C-71 Cabinets utilize the same cabinet with the difference of ultraviolet light sources. Model C-70G includes two each 15-watt shortwave and longwave ultraviolet tubes. The C-71 has four 15-watt longwave ultraviolet tubes. Tubes are mounted on one side of the cabinet to supply bright fluorescence. Rocker switches located on the front panel control on/off and ultraviolet selection.

Model	Part Number	Voltage
C-70G	95-0020-04	115V, 60Hz
C-70G	95-0020-05	230V, 50Hz
C-71	95-0022-01	115V, 60Hz
C-71	95-0022-02	230V, 50Hz

Cabinet dimensions

Exterior: 23.4"L x 15.8"W x 13"H (594 x 400 x 330mm)

Interior: 21"L x 13"W x 8"H (533 x 330 x 203mm)

Replacement Parts

Replacement parts for the C-70G and C-71 may be ordered from UVP through your local distributor. It is important when ordering parts to include the part number and model number of the cabinet. Below you will see a numbered diagram which corresponds to the part numbers on the replacement parts list.

Part Number	Description
10-0124-01	Cabinet, Top
10-0124-02	Cabinet, Bottom
10-0123-01	Housing Assembly, Lamp
18-0019-01	Bottom Plate
72-0003-01	Curtain
20-0169-01	Curtain Rod
23-0036-01	Eyepiece
38-0013-01	Contrast Control Filter
53-0126-01	Rocker Switch, 230V
53-0126-03	Rocker Switch, 115V
34-0002-01	Tubes, white 25 Watt 115V (qty 2)
34-0040-01	Tubes, 230V 10 Watt (qty 2)
34-0008-01	Tube, shortwave (C-70G)
34-0009-02	Tube (C-70G 2; C-71 4)
16-0057-01	Reflector
42-0001-03	Ballast, 115V 60Hz
42-0050-02	Ballast, 220V 50Hz
36-0002-01	Lamp Holder
36-0004-01	Socket, White Light
58-0003-04	Cable/Connector, 115V
68-0025-01	Strain Relief Bushing
68-0003-02	Grommet
38-0001-01	Filter, LW (C-70G 1; C-71 2)
98-0020-02	Filter Kit, SW (C-70G only)

Wiring Diagram

Contact UVP's customer service department for schematic diagrams.

Replacement of Filters

To replace the filter glass on C-70G and C-71 Cabinets, you will need a single edge razor blade. The following steps should be used as a guideline for replacing the filter glass in your Chromato-Vue Cabinet: Remove bottom plate from the cabinet and set aside. Next, turn the cabinet upside down and place it on a clean, flat surface. Remove the four (4) screws

from the filter cover and remove from the cabinet. Place the cover upside down on a clean, soft surface. Use a single edge razor blade to cut the RTV sealant around the filter. Remove the filter from the cover. Before installing the new filter, remove the remaining RTV sealant from the cover. Place the new filter in the cover, making sure it is centered over the cover cut-out. NOTE: Select the smoothest side of the filter and place that side face down in the cover. Next, apply the RTV sealant, supplied with the filter, around all edges of the filter, making sure the filter does not move in the cover. Allow about 8-10 hours for curing. Replace the cover in cabinet so that the longer filter is toward the cabinet front.

NOTE: The Chromato-Vue Cabinet should be turned off when not in use. This will insure longer life of the tubes and continued high-intensity of the lamps.

SAFETY PRECAUTIONS

WARNING

**Do not expose eyes and skin to shortwave ultraviolet radiation
as these rays are harmful to unprotected eyes and skin**

The above warning information is affixed to the top surface of the cabinets and lamps containing shortwave ultraviolet tubes. If it is removed or obscured, replace it by ordering a Warning Label (P/N 80-0068-01) from UVP or an authorized distributor.

The cabinet is designed to minimize UV radiation hazards to personnel. The special viewing filter blocks the passage of harmful UV rays that could cause eye damage. The lamps, cabinet and curtains have been designed for a light tight environment. If the integrity of these parts is maintained, no special precautions are required.

In cases where the lamp is to be operated independently of the cabinet, protective goggles may prove useful. See Accessories section for protective eyewear.

If any questions exist as to the intensity of ultraviolet radiation, it may be measured by the ultraviolet meters described in the Accessories section.

For further information of UV exposure hazards, recommended reference is: Threshold Limit Values for Chemical Substances and Physical Agents in the Workroom.

GENERAL MAINTENANCE

These cabinets are powerful sources of ultraviolet radiation which can cause serious damage to the unprotected eyes and skin. Before performing any maintenance on the unit, requiring operation of the tubes, be sure all personnel in the area are adequately protected. See Safety Precautions above.

Filter Care

The lamp filter glass may be cleaned with mild solvents or warm (not hot) water on a soft cloth. To remove grease, add a small amount of mild detergent to the water. The filter material has a slight tendency to absorb water which (depending on the chemicals dissolved into the water) can have an adverse effect on its transmission. After cleaning or observing wet items, dry the top surface with a soft cloth.

Troubleshooting

If lamps or white light (if applicable) fail to operate:

1. Check to see that the power is still present at the socket and that the Master ON/OFF switch is ON.
2. Warning: Shock Hazard - disconnect the unit before performing this step. Remove the Master ON/OFF switch cover. A fuse holder will now be exposed. Rotate the cap and withdraw the fuse. If the fusible element has been broken, check the circuitry for shorts. Replace the fuse.
3. If a single tube fails to light, place a known good tube in its position. If the tube lights, the original tube is faulty and needs replacing. If the good tube doesn't light, see step 4.

4. Check the circuitry for open circuit conditions (see C-65 Schematic for the wiring diagram). Correct any deviating conditions.
5. If the lamp still will not light, replace the ultraviolet tube or white light as appropriate.

ACCESSORIES

A variety of products are available for use with these cabinets. Contact UVP for ordering information.

Transilluminators: The bottom panel the cabinet can be removed and the cabinet placed over a transilluminator. The High Performance 25 watt Ultraviolet Transilluminators gives a variety of filter sizes (20x20cm up to 20x24cm) and wavelengths from which to choose. Part numbers can be obtained from UVP.

Eyewear: UVP eyewear line consists of spectacles, goggles and faceshield for eye protection.

UVC-303 Spectacles	98-0002-01
UVC-503 Goggles	98-0002-02
UVC-803 Face Shield	98-0002-04

UV Meter: UV intensity measuring instruments measure the intensity of UV light.

UVX Radiometer	97-0015-02
UVX-25 Sensor (254nm)	97-0016-01
UVX-31 Sensor (302nm)	97-0016-04
UVX-36 Sensor (365nm)	97-0016-02

WARRANTY

UVP's quality products are guaranteed to be free of defects in materials, workmanship and manufacture for one (1) year from date of purchase. Consumable and disposable products, including but not limited to tubes and filters, are guaranteed to be free from defects in manufacture and materials for ninety (90) days from the date of purchase. This warranty does not supersede any statutory rights that may be available in certain countries.

If equipment failure or malfunction occurs during the warranty period, UVP shall examine the inoperative equipment and have the option of repairing or replacing any part(s) which, in the judgment of UVP, were originally defective or became so under conditions of normal usage and service.

No warranty shall apply to any instrument, or part thereof, that has been subject to accident, negligence, alteration, abuse or misuse by the end-user. Moreover, UVP makes no warranties whatsoever with respect to parts not supplied by UVP or that have been installed and/or serviced other than in strict compliance with the instructions appearing in the operational manual supplied to the end user.

In no event shall UVP be responsible to the end user for any incidental or consequential damages, whether foreseeable or not, including but not limited to property damage, inability to use equipment, lost business, lost profits, or inconvenience arising out of or connected with the use of instruments produced by UVP. Nor is UVP liable or responsible for any personal injuries occurring as a result of the use, installation and/or servicing of equipment.