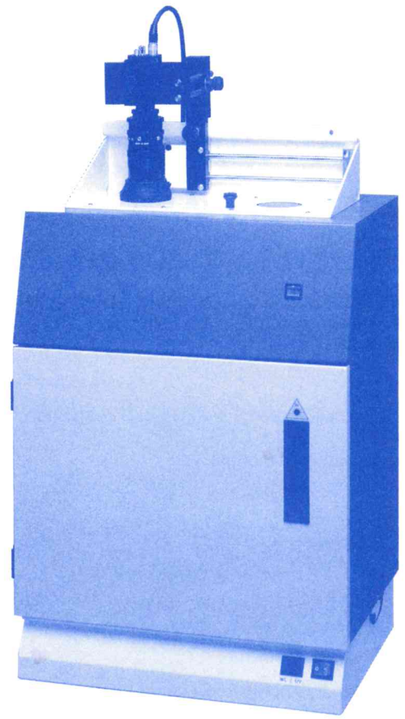
SPARE PARTS

Ref. Article	Tubes				Filter with support	Starter ST-151	Fuse Ø 5 x 20		Power
	Qty	Ref.	Wavelength	W			230 V~ 240 V~	100 V~ 115 V~	
TCP-15.M	4	T-8.M	312nm	8W	FS8-15.CM	4	2 A	3,15 A	64 W
TCP-15.C	4	T-8.C	254nm	8W	FS8-15.CM	4	2 A	3,15 A	64 W
TCP-20.L	6	T-8.L	365nm	8W	FS8-20.L	6	2 A	3,15 A	96 W
TCP-20.M	6	T-8.M	312nm	8W	FS8-20.CM	6	2 A	3,15 A	96 W
TCP-20.C	6	T-8.C	254nm	8W	FS8-20.CM	6	2 A	3,15 A	96 W
TCP-26.M	6	T-8.M	312nm	8W	FS8-26.CM	6	2 A	3,15 A	96 W
TCP-26.C	6	T-8.C	254nm	8W	FS8-26.CM	6	2 A	3,15 A	96 W
TCX-15.M	4	T-8.M	312nm	8W	FS8-15.CM	4	2 A	3,15 A	64 W
TCX-15.C	4	T-8.C	254nm	8W	FS8-15.CM	4	2 A	3,15 A	64 W
TCX-20.M	6	T-8.M	312nm	8W	FS8-20.CM	6	2 A	3,15 A	96 W
TCX-20.C	6	T-8.C	254nm	8W	FS8-20.CM	6	2 A	3,15 A	96 W
TCX-26.M	6	T-8.M	312nm	8W	FS8-26.CM	6	2 A	3,15 A	96 W
TCX-26.C	6	T-8.C	254nm	8W	FS8-26.CM	6	2 A	3,15 A	96 W
TFP-20.L	6	T-15.L	365nm	15W	FSP-T20.L	6	3,15 A	4 A	180 W
TFP-35.L	6	T-15.L	365nm	15W	FSP-T35.L	6	3,15 A	4 A	180 W
TFX-20.M	6	T-15.M	312nm	15W	FSP-T20.CM	6	3,15 A	4 A	180 W
TFX-20.C	6	T-15.C	254nm	15W	FSP-T20.CM	6	3,15 A	4 A	180 W
TFX-26.M	6	T-15.M	312nm	15W	FSP-T26.CM	6	3,15 A	4 A	180 W
TFX-26.C	6	T-15.C	254nm	15W	FSP-T26.CM	6	3,15 A	4 A	180 W
TFX-35.M	6	T-15.M	312nm	15W	FSP-T35.CM	6	3,15 A	4 A	180 W
TFX-35.C	6	T-15.C	254nm	15W	FSP-T35.CM	6	3,15 A	4 A	180 W
TFX-40.M	6	T-15.M	312nm	15W	FSP-T40.CM	6	3,15 A	4 A	180 W
TFX-40.C	6	T-15.C	254nm	15W	FSP-T40.CM	6	3,15 A	4 A	180 W
TFX-20.LM	6	T-15.L	365nm	15W	FSP-T20.CM	6	3,15 A	4 A	180 W
	6	T-15.M	312nm	15W		6	3,15 A	4 A	
TFX-20.MC	6	T-15.M	312nm	15W	FSP-T20.CM	6	3,15 A	4 A	180 W
	6	T-15.C	254nm	15W		6	3,15 A	4 A	
TFX-20.LC	6	T-15.L	365nm	15W	FSP-T20.CM	6	3,15 A	4 A	180 W
	6	T-15.C	254nm	15W		6	3,15 A	4 A	
TFX-35.LM	6	T-15.L	365nm	15W	FSP-T35.CM	6	3,15 A	4 A	180 W
	6	T-15.M	312nm	15W		6	3,15 A	4 A	
TFX-35.MC	6	T-15.M	312nm	15W	FSP-T35.CM	6	3,15 A	4 A	180 W
	6	T-15.C	254nm	15W		6	3,15 A	4 A	
TFX-35.LC	6	T-15.L	365nm	15W	FSP-T35.CM	6	3,15 A	4 A	180 W
	6	T-15.C	254nm	15W		6	3,15 A	4 A	
TFP-C/WL	6	T-8.C	254nm	8W	FSP-CM/WL	6	2 A	3,15 A	100 W
	2	T-8.WL	White Light	8W		2	2 A	3,15 A	
TFP-M/WL	6	T-8.M	312nm	8W	FSP-CM/WL	6	2 A	3,15 A	100 W
	2	T-8.WL	White Light	8W		2	2 A	3,15 A	
TFP-L/WL	6	T-8.L	365nm	8W	FSP-L/WL	6	2 A	3,15 A	100 W
	2	T-8.WL	White Light	8W		2	2 A	3,15 A	
TFX-35.WL	2	T-15.WL	White Light	15W	FS-T35.WL	2	2 A	3,15 A	80 W
	2	T-6.WL	White Light	6W		2	2 A	3,15 A	
TCL-20.WL	6	T-15.WL	White Light	15W	FTCL-20.WL	6	3,15 A	4 A	250 W
TCL-20.L	6	T-15.L	365nm	15W	FTCL-20.L	6	3,15 A	4 A	250 W
TCL-20.M	6	T-15.M	312nm	15W	FTCL-20.CM	6	3,15 A	4 A	250 W
TCL-20.C	6	T-15.C	254nm	15W	FTCL-20.CM	6	3,15 A	4 A	250 W
TCL-35.WL	6	T-15.WL	White Light	15W	FTCL-35.WL	6	3,15 A	4 A	250 W
TCL-35.L	6	T-15.L	365nm	15W	FTCL-35.L	6	3,15 A	4 A	250 W
TCL-35.M	6	T-15.M	312nm	15W	FTCL-35.CM	6	3,15 A	4 A	250 W
TCL-35.C	6	T-15.C	254nm	15W	FTCL-35.CM	6	3,15 A	4 A	250 W
SIDE-ARMS	2	T-8.L	365nm	8W	FS-8.CM	2			
	2	T-8.C	254nm	8W	FS-8.CM	2			
	2	T-8.WL	White Light	8W		2			
CN-TFX	2	ALB-25 Bulb	White Light	25W			3,15 A	4 A	50 W
CN-UV/WL	2	ALB-25 Bulb	White Light	25W			2 A	3,15 A	50 W
CN-08	1	ALB-25 Bulb	White Light	25W			2 A	3,15 A	25 W

Imp. MENARD : 01 43 08 71 18

(V-97.3– 03.2001)

FLUORESCENT TABLES COMBI - LIGHT



DARKROOM WITH CAMERA SUPPORT FOR TABLE

VILBER LOURMAT
B.P.66 – Z.I. sud Torcy
77 202 MARNE-LA-VALLEE CEDEX 1
FRANCE
Tel. : 33 1 60 06 07 71 Fax. : 33 1 64 80 48 59
http://www.vilber.com

GENERAL

You have purchased a new UV generator. We are sure it will give you entire satisfaction.

All our UV generators come equipped with the following :

UV SAFETY SCREEN	- total protection for the user against UV rays, - fully adjustable angle.
FILTER	- long lifetime - unrivalled UV transmitting quality, - high capacity for absorption of visible light, - brighter fluorescent response.
REFLECTOR	- high reflecting quality to give a perfect diffusion of UV radiation ("Optic" quality).
FILTER SUPPORT	- stainless steel.
UV INTENSITY SELECTOR (2 positions)	- on TFX models, - position 100% for reading, - position 70% for preparation.

WARNING / ON THE SAFETY

a) This unit must be connected to a wall outlet having protective earth terminal. Connecting to ground constitutes an obligatory protection.
b) To prevent fire or shock hazard, do not expose the unit to rain or moisture.
c) Unplug the unit from the wall outlet if you will not be using it for a long time. Disconnect the power cord by grasping the plug. Never pull the cord itself.
d)

This symbol is warning against a possible UV radiation. You have to protect the eyes and skin from the UV radiation.
e) Never obstruct the air admission grids of the unit.

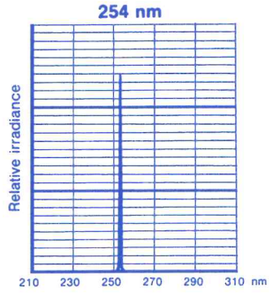
CLIMATIC CONDITIONS USING

- Altitude : ≤ 2000 meters
- Operating humidity : 20% to 80% (no condensation allowed)
- Operating temperature : 5°C to 33°C

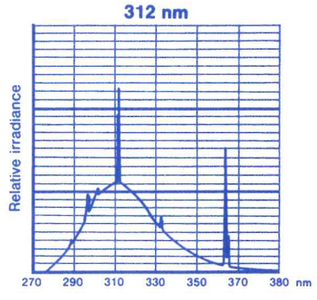
GENERAL ADVICE

- Do not place gels directly on the filter, this helps to preserve the transmitting qualities of the filter. Use a gel supporting plate (only for tables in 312nm or 365nm).
- To clean the surface of the filter, use a mild solvent or warm water. Dry with a soft cloth.
- The filter is porous, so try to keep it dry.

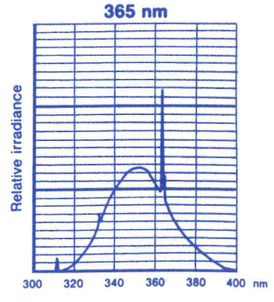
SPECTRAL CURVES



Filter lifetime
2000 hours
Intensity : 7 mW/cm²



Unlimited filter life time
No 254nm emission guaranteed
Intensity : 8 mW/cm²

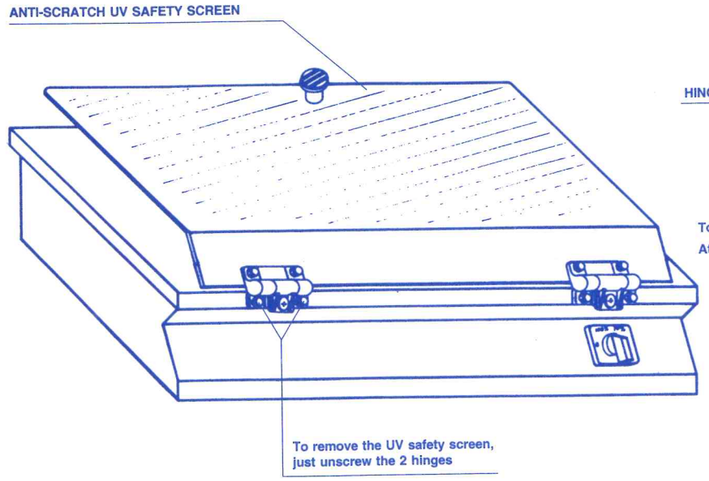


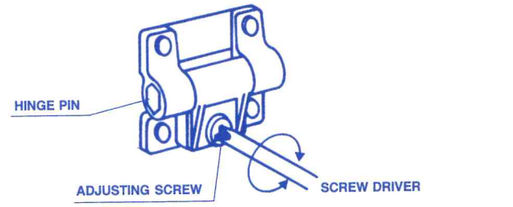
Unlimited filter life time
No 254nm emission guaranteed
Intensity : 7 mW/cm²

WARRANTY

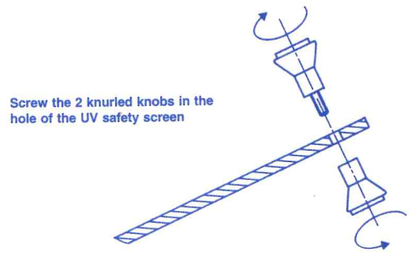
Our products (except tubes and filters) are warranted against faulty construction or defective material for a period of ONE YEAR from the date of supply except for damage due to carelessness, incorrect utilisation or bad maintenance.
The use of consumable products or non-original spare parts not recommended by our service department is at the user's own risk and therefore automatically invalidates the warranty.
We reserve the right to decide where the faulty goods will be repaired (in our workshop or elsewhere), and whether or not the faulty part is to be replaced, all other freight charges incurred being at the cost of the purchaser.
Returned goods will not be accepted for repair unless previous written authorisation is obtained from our service department.
Manufacturer cannot be held responsible for any loss, bodily injury or material accident incurred by any failure of this supply, whatever the origin of this failure may be.
The responsibility of Manufacturer is strictly limited to its staff and to its own supplies.

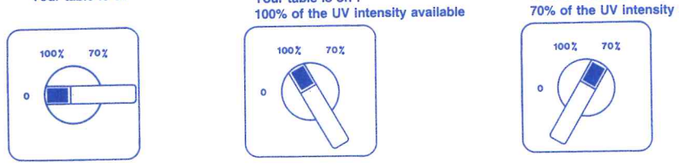
GENERAL INSTRUCTIONS





To increase or decrease the friction on the hinge pin, just turn a single screw
Attention : do not lock the adjusting screw too tight.

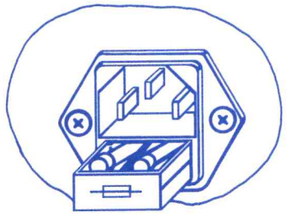




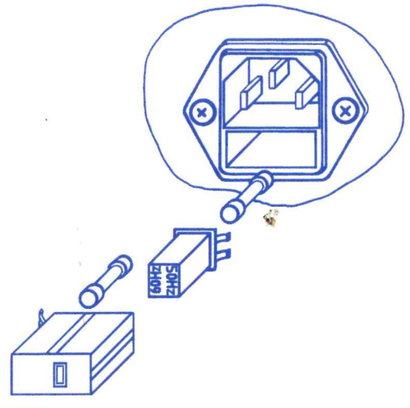
NOTE
Wait at least 20 second in the "100%" position before reducing the intensity selector to "70%"

All our fluorescent tables are fitted with one or two safety fuses. These are found in the plug at the back of the table.
The plugs vary according to the type of table and the voltage (see the 2 different types below)

All units
220V - 240V - 115V



All units except
Fluo-link 100V 50/60 Hz



TYPE OF FUSE

. Type FST
. Time-lag T
. Ø 5 x 20
(see fuse values in the spare parts board on the last page)

CHANGING THE FREQUENCY

For units 100V - 50/60 Hz :

- Remove the fuse holder tray,
- Remove the frequency selector located inside,
- Twist a half turn to change the frequency. Check that the value visible through the fuse holder tray corresponds to the desired frequency.

POWER

- See the power values for each item in the spare parts and characteristics board on the last page.

T C X TABLES

OPERATING INSTRUCTIONS

- Place your UV Table on a level working surface,
- Check that your electrical supply is compatible with the voltage of your table,
- Plug the unit into a **properly grounded electrical outlet**,
- First of all put the selector to position 100%. Then put the ON/OFF switch to the ON position (the switch diode will light up).
- To work in "reading" mode, select position 100%,
- To work in "preparation" mode, select position 70%,
- After use, put the ON/OFF switch to the OFF position.

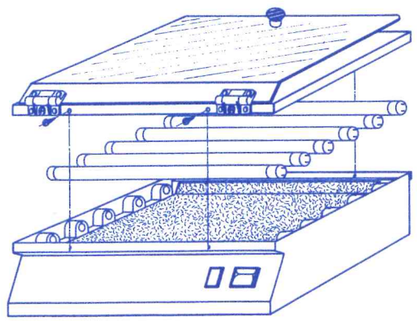
NOTE
Wait at least 20 second in the "100%" position before reducing the intensity selector to "70%"

CHANGING THE TUBES

a) Before dismantling, **unplug the Table**,
b) Unscrew the 4 fixing screws on the filter support,
c) Remove the filter support,
d) Open the upper tube support,
e) Change the 6 tubes and 6 starters (starters are located under the reflector. A quarter turn will release the tubes and the starters).

IMPORTANT : Reassemble the table completely before checking it functions correctly.

To reassemble the table, follow the above instructions in reverse order.
(fuses are located in the plug - see page 2)



T C P TABLES

OPERATING INSTRUCTIONS

- Place your UV Table on a level working surface,
- Check that your electrical supply is compatible with the voltage of your table,
- Plug the unit into a **properly grounded electrical outlet**,
- Put the ON/OFF switch to the ON position : (the switch diode will light up).
- After use, put the ON/OFF switch to the OFF position.

CHANGING THE TUBES

- Same procedure as TCX tables

WARNING
UV radiation can be dangerous for unprotected eyes and skin, therefore we recommend the user to wear UV protective goggles (LP-70) or face-shield (MP-80 or MP-800).

T F X TABLES

OPERATING INSTRUCTIONS

- Place your UV Table on a level working surface,
- Check that your electrical supply is compatible with the voltage of your table,
- Plug the unit into a **properly grounded electrical outlet**,
- To work in "reading" mode, select position 100%,
- To work in "preparation" mode, select position 70%,
- After use, select position 0.

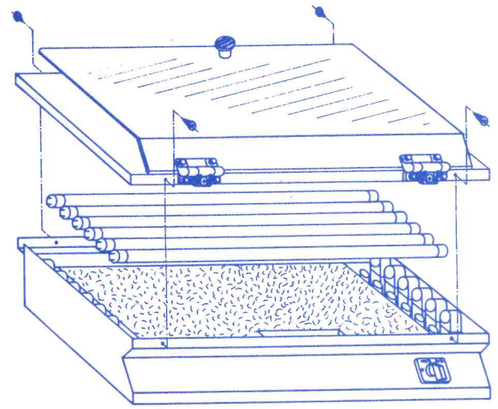
NOTE
Wait at least 20 second in the "100%" position before reducing the intensity selector to "70%"

CHANGING THE TUBES

a) Before dismantling, **unplug the Table**,
b) Unscrew the 4 fixing screws on the filter support,
c) Remove the filter support,
d) Change the 6 tubes and 6 starters (starters are located under the tubes. A quarter turn will release the tubes and the starters).

IMPORTANT : Reassemble the table completely before checking it functions correctly.

To reassemble the table, follow the above instructions in reverse order.
(fuses are located in the plug - see page 2)



T F P TABLES

OPERATING INSTRUCTIONS

- Place your UV Table on a level working surface,
- Check that your electrical supply is compatible with the voltage of your table,
- Plug the unit into a **properly grounded electrical outlet**,
- Put the switch to position 1
- After use, put the switch to position 0.

CHANGING THE TUBES

- Same procedure as TCX tables

WARNING
UV radiation can be dangerous for unprotected eyes and skin, therefore we recommend the user to wear UV protective goggles (LP-70) or face-shield (MP-80 or MP-800).

T F X TABLES - 2 Wavelengths

OPERATING INSTRUCTIONS

- Place your UV Table on a level working surface,
- Check that your electrical supply is compatible with the voltage of your table,
- Plug the unit into a **properly grounded electrical outlet**,
- Select the desired wavelength,
- To work in "reading" mode, select position 100%,
- To work in "preparation" mode, select position 70%,
- The diode corresponding to the selected wavelength will light up,
- To change the wavelength, first return the selector to position 0,
- After use, select position 0.

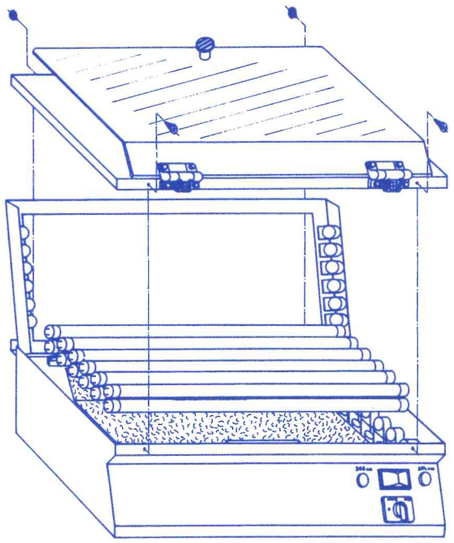
NOTE
Wait at least 20 second in the "100%" position before reducing the intensity selector to "70%"

CHANGING THE TUBES

a) Before dismantling, **unplug the Table**,
b) Unscrew the 4 fixing screws on the filter support,
c) Remove the filter support,
d) Open the upper tube support,
e) Change the 12 tubes and 12 starters (starters are located under the tubes. A quarter turn will release the tubes and the starters).
f) **CAREFUL** : place the tubes according to their wavelength

IMPORTANT : Reassemble the table completely before checking it functions correctly.

To reassemble the table, follow the above instructions in reverse order.
(fuses are located in the plug - see page 2)

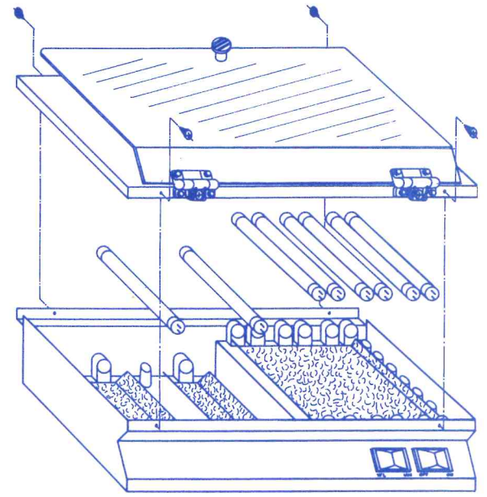


WARNING
UV radiation can be dangerous for unprotected eyes and skin, therefore we recommend the user to wear UV protective goggles (LP-70) or face-shield (MP-80 or MP-800).

TFP-UV/WL MIXED TABLES

OPERATING INSTRUCTIONS

- Place your UV Table on a level working surface,
- Check that your electrical supply is compatible with the voltage of your table,
- Plug the unit into a **properly grounded electrical outlet**,
- Select the type of lighting you require (white light, or ultraviolet),
- Put the ON/OFF switch to the ON position - the switch diode will light up,
- After use, put the ON/OFF switch to the OFF position.



CHANGING THE TUBES

a) Before dismantling, **unplug the Table**,
b) Unscrew the 4 fixing screws on the filter support,
c) Remove the filter support,
d) Change the 8 tubes and 8 starters (starters are located under the tubes. A quarter turn will release the tubes and the starters).
e) **CAREFUL** : place the tubes according to their wavelength

IMPORTANT : Reassemble the table completely before checking it functions correctly.

To reassemble the table, follow the above instructions in reverse order.
(fuses are located in the plug - see page 2)

TFX-35.WL TABLE

OPERATING INSTRUCTIONS

- Place your UV Table on a level working surface,
- Check that your electrical supply is compatible with the voltage of your table,
- Plug the unit into a **properly grounded electrical outlet**,
- Select position 100% for maximum intensity,
- Select position 70% for reduced intensity,
- After use, select position 0.

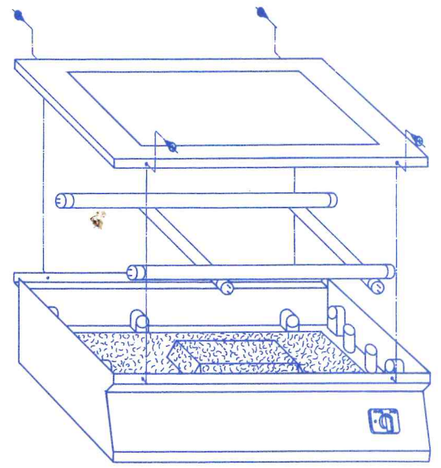
NOTE
Wait at least 20 second in the "100%" position before reducing the intensity selector to "70%"

CHANGING THE TUBES

a) Before dismantling, **unplug the Table**,
b) Unscrew the 4 fixing screws on the filter support,
c) Remove the filter support,
d) Change the 4 tubes and 4 starters (starters are located under the tubes. A quarter turn will release the tubes and the starters).

IMPORTANT : Reassemble the table completely before checking it functions correctly.

To reassemble the table, follow the above instructions in reverse order.
(fuses are located in the plug - see page 2)

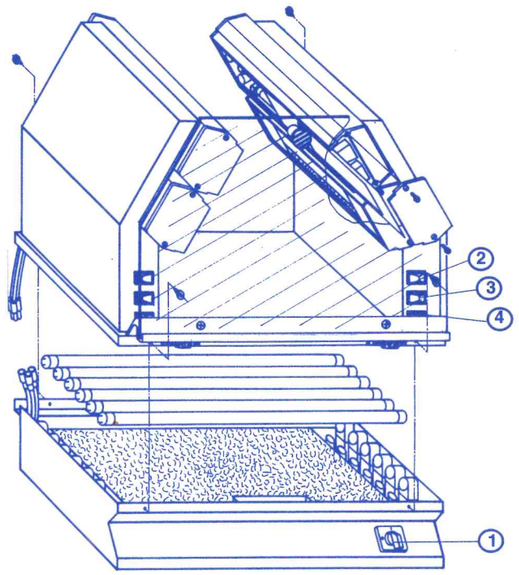


WARNING
UV radiation can be dangerous for unprotected eyes and skin, therefore we recommend the user to wear UV protective goggles (LP-70) or face-shield (MP-80 or MP-800).

COMBI - LIGHT

OPERATING INSTRUCTIONS

- Place your Combi-light on a level working surface,
- Check that your electrical supply is compatible with the voltage of your Combi-light,
- Plug the unit into a **properly grounded electrical outlet**,
- To work in "reading" mode, select position 100%,
- To work in "preparation" mode, select position 70%,
- After use, select position 0.



To switch on the side-arms :

- 254nm : switch n° 2
- 365nm : switch n° 3
- White light : switch n° 4

- After use, put all switches on the OFF position

CHANGING THE TUBES

- Before dismantling, **unplug the Combi-light**.

TUBES IN THE TABLE

a) Unscrew the 4 fixing screws on the filter support,
b) Remove the filter support,
c) Change the 6 tubes and 6 starters (starters are located under the tubes. A quarter turn will release the tubes and the starters).

TUBES IN THE SIDE-ARMS

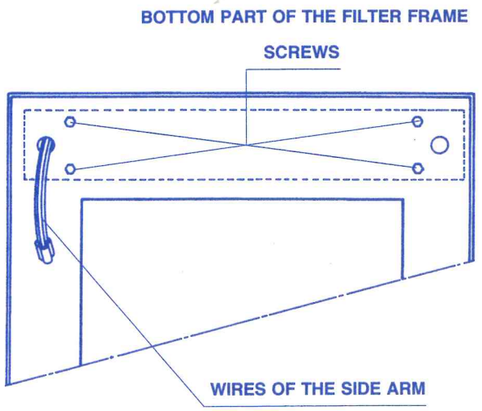
a) Unscrew the 2 screws in the end-plate,
b) Remove the end-plate,
c) Remove the filter support,
d) Change the tubes and the starters

IMPORTANT : Reassemble the unit completely before checking it functions correctly.

To reassemble the table, follow the above instructions in reverse order.

CHANGING THE FILTER OF THE TABLE

a) Before dismantling, **unplug your Combi-light**,
b) Unscrew the 4 fixing screws on the filter support,
c) Raise the filter support and disconnect the cable in each side-arm (note the colour of each cable),
d) Completely remove the filter support,
e) Unscrew and remove the 4 fixing screws in each of the side-arms,
f) Fix the 2 side-arms onto the new filter support by first passing the cables through the corresponding holes,
g) Reconnect the cables on the side-arms according to the colours,
h) Fit the filter support onto the table.



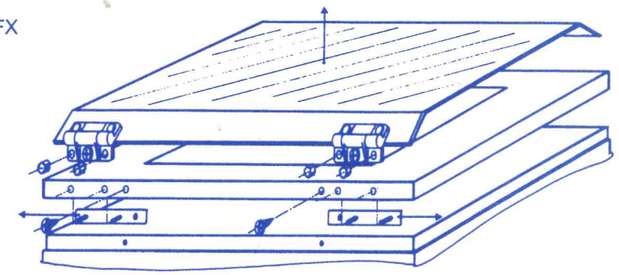
WARNING

UV radiation can be dangerous for unprotected eyes and skin, therefore we recommend the user to wear UV protective goggles (LP-70) or face-shield (MP-80 or MP-800).

CN-TFX / CN-08 DARKROOM

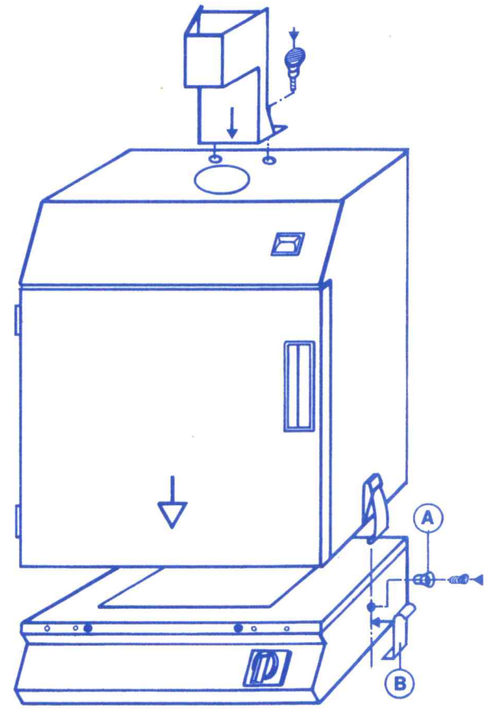
Your CN-TFX is designed for assembling with a TFP, or TFX Table.

Your CN-08 is designed for assembling with a Table type TCP or TCX.



OPERATING INSTRUCTIONS

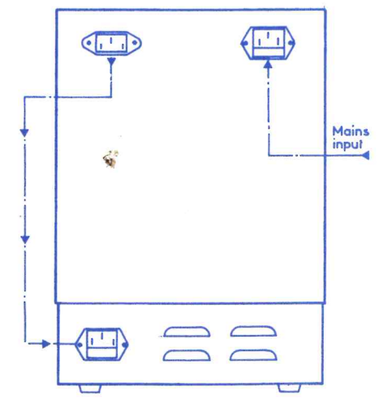
a) Before dismantling, **unplug the Table**,
b) Unscrew the 4 fixing screws on the filter support,
c) Remove the filter support,
d) Unscrew the 4 low fixing nuts on the two hinges,
e) Remove the set UV safety screen and the two hinges with their screws,



f) Replace the filter support on the table then fix it by the 4 screws,
g) Door closed, put the darkroom on the table,
h) For fixing the darkroom by the two draw latches, unscrew the two screws placed on each side of your table, then screw in the same place the two black buttons (A) supplied with the darkroom. If your table hasn't the two screws, stick the two black pieces (B) on the sides of the table in front of the latches,
i) Then attach the darkroom with the help of the two draw latches,

j) Plug the cord supplied with your darkroom between the table and the darkroom,
k) Plug the female end of the table power cord into the darkroom,
l) Place the set Table + Darkroom on a level working surface. Be sure there is enough room in front for the door to open easily,
m) You can use your table normally (see its notice) the unit will not operate when the door is opened,
n) Put the darkroom ON/OFF switch to the ON position for the white light
o) Fix the camera support with the help of the two knurled knobs then attach your camera to this support and adjust it in height

(fuses are located in the plug - see page 2)



WARNING

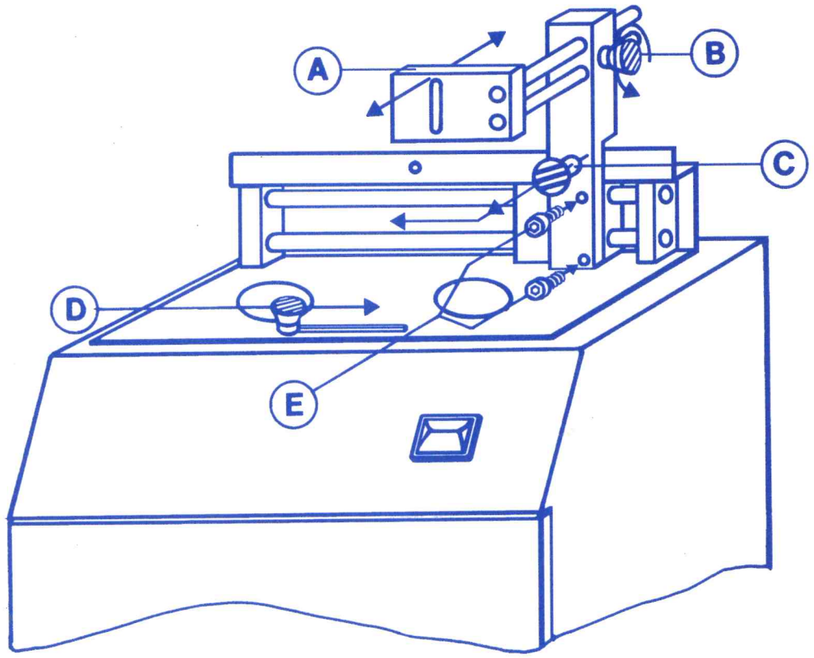
UV radiation can be dangerous for unprotected eyes and skin, therefore we recommend the user to wear UV protective goggles (LP-70) or face-shield (MP-80 or MP-800).

CN-UV/WL DARKROOM

Your CN-UV/WL is designed for assembling with a mixed table.

OPERATING INSTRUCTIONS

Same procedure as CN-TFX



ABOUT THE TRAVELLING CAMERA SUPPORT

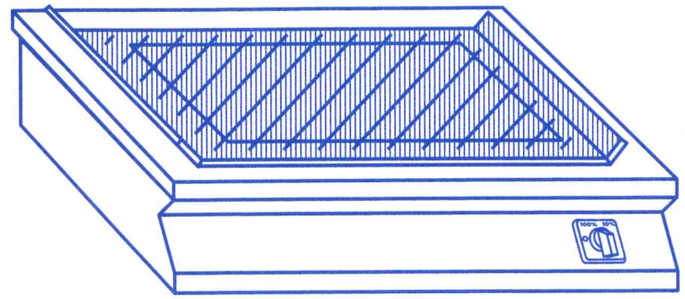
- The camera support arm is supplied dismantled,
- Attach it to the mobile block with the two screws (E) and the key furnished with the set (use the two holes on the right side of the mobile block),
- Unscrew the knurled knob (B) and pull the camera support (A) without sliding out the guides from their holes,
- Attach the camera to the support (A) in order to centre the zoom on one of the two apertures,
- Once the camera centred, tighten the knurled knob (B) to block the camera support (A),
- The CN-UV/WL darkroom can be used either for white light (left area of the table) or for UV light (right area of the table),
- Position the camera at the centre of the lighted aperture according to the type of lighting selected. This operation is very easy and high precision. To position the camera on the other aperture, just pull the catch finger (C) and slide the camera support set to the new position,
- Unscrew and slide the knurled knob (D) in order to cover the aperture not used, then re-tighten the knurled knob (D).

WARNING

UV radiation can be dangerous for unprotected eyes and skin, therefore we recommend the user to wear UV protective goggles (LP-70) or face-shield (MP-80 or MP-800).

ACCESSORIES

In order to preserve the transmitting qualities of the UV filter, we recommend you to use a gel support plate (GSP-26) 220 x 270mm, or (GSP-40) 235 x 420mm depending on the gel dimensions used (only for tables in 312nm or 365nm).



. **GSP-26**	gel supporting plate	(220 x 270mm)
. **GSP-40**	gel supporting plate	(235 x 420mm)

CONVERSION FILTER

FC-26.WL : Converter of UV Light in White Light (working area : 260 x 210mm).

PROTECTION

LP-70	:	Goggles for total eye protection.
MP-80	:	Face-shield for total face protection.
MP-800	:	Face-shield for total face and ear protection.

OTHER ACCESSORIES

CN15-WL : Darkroom with white light which can be fitted onto our standard tables for maximum fluorescence in daylight. The lighting (2 x 40W white light) enables you to handle easily the object you want to visualise.

CN15-UV : UV darkroom which can be fitted onto our standard UV tables for very high UV intensity in daylight.

* CN-15.LL	365nm	* CN-15.LC	365/254nm
* CN-15.CC	254nm	* CN-15.LM	365/312nm
* CN-15.MM	312nm	* CN-15.MC	312/254nm

CE DECLARATION OF CONFORMITY

The materials complies with the requirements of the EC Directive 89/336/EEC, 73/23/EEC and EN 61010-1 (electro-magnetic compatibility and low voltage)
The electro-magnetic susceptibility has been chosen at a level that gains proper operation in residential areas, on business and light industrial premises and on small-scale enterprises, inside as well as outside of the buildings. All places of operation are characterized by their connection to the public low voltage power supply system