

Consort

MANUAL

E27xxx

October 2006

You have purchased a new UV transilluminator. We are sure it will give you entire satisfaction. All our UV transilluminators come equipped with the following:

- | | |
|--|---|
| ▪ UV safety screen | - total protection for the user against UV rays,
- fully adjustable angle.
- long lifetime |
| ▪ Filter | - 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 ECX and ETX models (position 100% for reading, position 70% for preparation). |

➔ Warning / On the safety

- This unit must be connected to a wall outlet having protective earth terminal. Connecting to ground is an obligatory protection.
- To prevent fire or shock hazard, do not expose the unit to rain or moisture.
- Unplug the unit from the wall outlet if you do not use it for a long time. Disconnect the power cord by grasping the plug. Never pull the cord itself.
- Never obstruct the air admission grids of the unit.



This symbol is warning against a possible UV radiation. Protect the eyes and skin from the UV radiation.

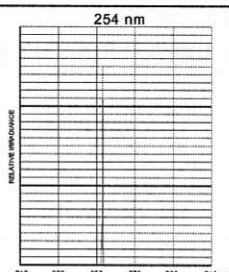
➔ Climatic conditions

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

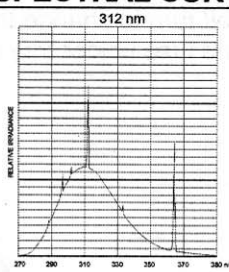
➔ General advice

- 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.
- Normal cycle using: 1 to 25 minutes.

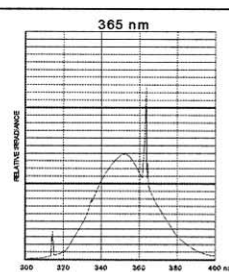
SPECTRAL CURVES



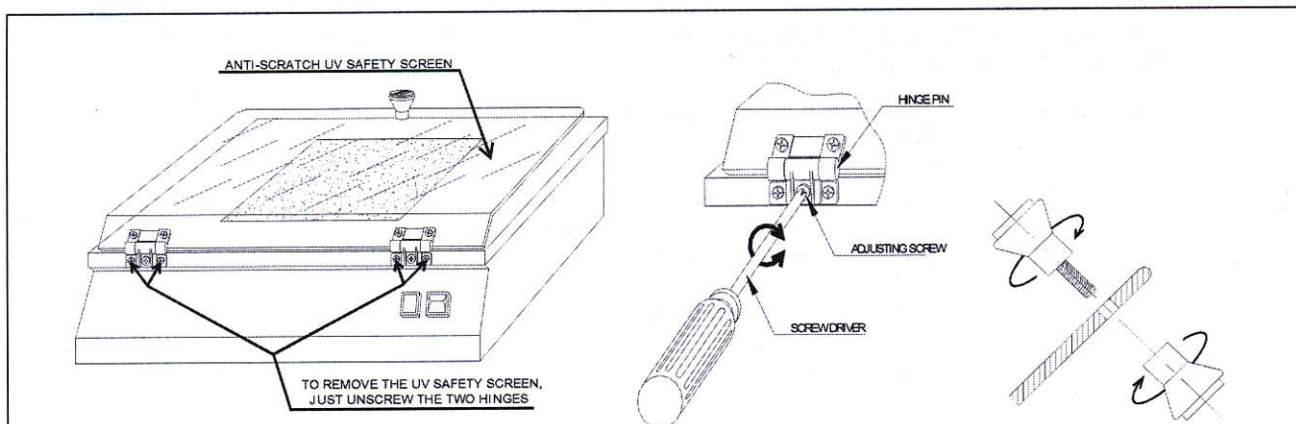
Filter lifetime: 2000 hours
Intensity : 7 mW/cm²



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



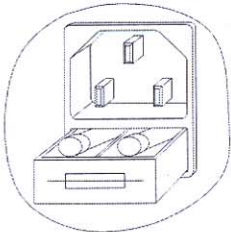
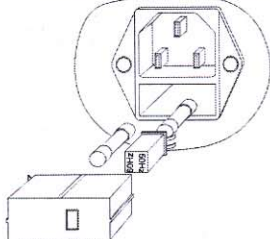
Unlimited filter life time
No 254nm emission guaranteed
Intensity : 7 mW/cm²



CAUTION: Switch off the fluorescent table when electrophoresis gel is not present. The fluorescent table should not be kept "On" for more than 25 minutes without gel. If such is the case, switch off the fluorescent table for 20 minutes before a new utilization. If the filter is too hot, it will destroy your electrophoresis gel.

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

➔ Type of socket and fuse

Type of sockets for all models	Sockets for all 100V~ 50/60Hz models except ECX and ETX	Type of fuse (all models)
		Type FST Time-lag T Ø 5 x 20

Power: See the power values for each item in the spare parts and characteristics board on the last page of the manual.

➔ Changing the frequency

ETX/ECX models work at all frequency	<p>For other 100V~ - 50/60 Hz models:</p> <ul style="list-style-type: none"> 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.
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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).

→ Operating instructions

- Place your UV Table on a level working surface,
- Plug the unit into **a properly grounded electrical outlet**,
- To work in "reading" mode, select position 100%, then switch on the on/off switch
- To work in "preparation" mode, select position 70%, then switch on the on/off switch
- After use, switch off the on/off switch.

CAUTION: Switch off the fluorescent table when electrophoresis gel is not present on the transilluminator. The fluorescent table should not be kept on "On" for more than 25 minutes without gel. If such is the case, switch off the fluorescent table for 20 minutes before a new utilization. If the filter is too hot, it will damage your electrophoresis gel.

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

CAUTION: When one or several tubes are out of order, the warning tubes flicker for a short moment at the lighting of the UV table. In order to check which tubes are faulty you have to switch the table on for a few seconds. The correct tubes are flickering. The faulty tubes don't turn on and don't flicker at all. In this case you need to change only the tubes which have not turned on and which have not flickered during these few seconds. Please note that, for security, as soon as there is 1 faulty tube (or more), the power supply of the card board is interrupted (switched off).

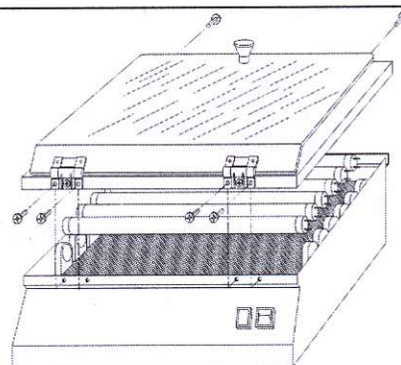
For a better homogeneity, change the 6 tubes simultaneously.

→ Changing the tubes

- Before dismantling, **unplug the UV Table**,
- Unscrew the 6 fixing screws on the filter support,
- Remove the filter support,
- Change the 6 tubes (A quarter turn will release the tubes).

IMPORTANT: Reassemble the UV table completely before checking it works correctly.

To reassemble the UV table, follow the above instructions in reverse order. Fuses are located in the plug - see page 4.



→ Spare parts

Ref. Article	Qty	Ref.	Tubes		Filter with support	Fuse Ø 5 x 20		Power
			Wavelength	W		230 V~ 240 V~	100 V~ 115 V~	
ECX-15.L	6	T-8.L	365nm	8W	FSP-TC15.L	2 A	2 A	55 W
ECX-15.M	6	T-8.M	312nm	8W	FSP-TC15.CM	2 A	2 A	55 W
ECX-15.MX	6	T-8.M	312nm	8W	FSP-TC15.MX	2 A	2 A	55 W
ECX-15.C	6	T-8.C	254nm	8W	FSP-TC15.CM	2 A	2 A	55 W
ECX-20.L	6	T-8.L	365nm	8W	FSP-TC20.L	2 A	2 A	55 W
ECX-20.M	6	T-8.M	312nm	8W	FSP-TC20.CM	2 A	2 A	55 W
ECX-20.C	6	T-8.C	254nm	8W	FSP-TC20.CM	2 A	2 A	55 W
ECX-26.M	6	T-8.M	312nm	8W	FSP-TC26.CM	2 A	2 A	55 W
ECX-26.MX	6	T-8.M	312nm	8W	FSP-TC26.MX	2 A	2 A	55 W
ECX-26.C	6	T-8.C	254nm	8W	FSP-TC26.CM	2 A	2 A	55 W



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).

→ Operating instructions

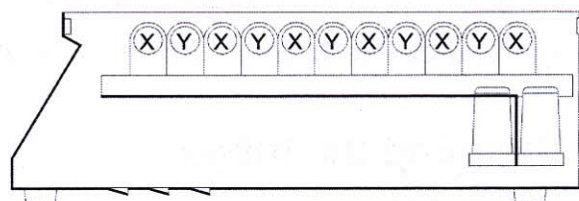
- Place your transilluminator on a level working surface,
- Check that your electrical supply is compatible with the voltage of your transilluminator,
- Plug the unit into a **properly grounded electrical outlet**,
- Select the desired wavelength,
- Put the O/I switch to the I position
- The switch diode will light up
- To change the wavelength, put the switch to position O.
- After use, select position O.

→ Changing the tubes

- Before dismantling, **unplug the TABLE**,
- Unscrew the 6 fixing screws on the filter support,
- Remove the filter support,
- Change the 6 tubes of the first wavelength and 5 tubes of the second wavelength, then the 11 starters. (starters are located under the tubes). A quarter turn will release the tubes and the starters.
- CAREFULLY** keep tubes in the same order (see diagram)

IMPORTANT: Reassemble the transilluminator completely before checking it works correctly.

To reassemble the transilluminator, follow the above instructions in reverse order. Fuses are located in the plug (see page 4)



**TCP-20.LM/TCP-26.LM : X = T-8.L 365nm
: Y = T-8.M 312nm**

**TCP-20.MC/TCP-26.MC : X = T-8.M 312nm
: Y = T-8.C 254nm**

**TCP-20.LC/TCP-26.LC : X = T-8.L 365nm
: Y = T-8.C 254nm**

→ Spare parts

Ref. Article	Qty	Tubes			Filter with support	Starter ST-151 (230/115V) FG-7P (100V)	Fuse Ø 5 x 20		Power
		Ref.	Wavelength	W			230 V~ 240 V~	100 V~ 115 V~	
TCP-20.LM	6	T-8.L	365nm	8W	FSP-TC20.CM	11	2 A	3.15 A	96 W
	5	T-8.M	312nm	8W		11	2 A	3.15 A	
TCP-20.MC	6	T-8.M	312nm	8W	FSP-TC20.CM	11	2 A	3.15 A	96 W
	5	T-8.C	254nm	8W		11	2 A	3.15 A	
TCP-20.LC	6	T-8.L	365nm	8W	FSP-TC20.CM	11	2 A	3.15 A	96 W
	5	T-8.C	254nm	8W		11	2 A	3.15 A	
TCP-26.LM	6	T-8.L	365nm	8W	FSP-TC26.CM	11	2 A	3.15 A	96 W
	5	T-8.M	312nm	8W		11	2 A	3.15 A	
TCP-26.MC	6	T-8.M	312nm	8W	FSP-TC26.CM	11	2 A	3.15 A	96 W
	5	T-8.C	254nm	8W		11	2 A	3.15 A	
TCP-26.LC	6	T-8.L	365nm	8W	FSP-TC26.CM	11	2 A	3.15 A	96 W
	5	T-8.C	254nm	8W		11	2 A	3.15 A	



WARNING



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→ Operating instructions

- Place your UV Table on a level working surface,
- Plug the unit into **a properly grounded electrical outlet**,
- To work in "reading" mode, select position 100%, then switch on the on/off switch
- To work in "preparation" mode, select position 70%, then switch on the on/off switch
- After use, switch off the on/off switch.

CAUTION : Switch off the fluorescent table when electrophoresis gel is not present on the transilluminator. The fluorescent table should not be kept on "On" for more than 25 minutes without gel. If such is the case, switch off the fluorescent table for 20 minutes before a new utilization. If the filter is too hot, it will damage your electrophoresis gel.

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

CAUTION: When one or several tubes are out of order, the warning tubes flicker for a short moment at the lighting of the table. In order to check which tubes are faulty you have to switch the table on for a few seconds. The correct tubes are flickering. The faulty tubes don't turn on and don't flicker at all. In this case you need to change only the tubes which have not turned on and which have not flickered during these few seconds. Please note that, for security, as soon as there is 1 faulty tube (or more), the power supply of the card board is interrupted (switched off).

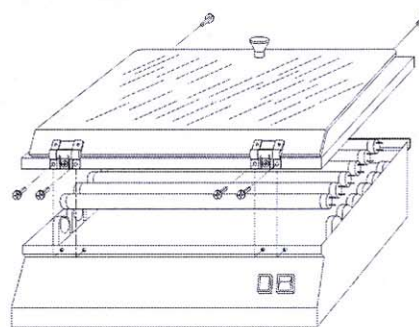
For a better homogeneity, change the 6 tubes simultaneously.

→ Changing the tubes

- Before dismantling, **unplug the UV Table**,
- Unscrew the 6 fixing screws on the filter support,
- Remove the filter support,
- Change the 6 tubes (A quarter turn will release the tubes).

IMPORTANT: Reassemble the UV table completely before checking it works correctly.

To reassemble the UV table, follow the above instructions in reverse order. Fuses are located in the plug - see page 4.



→ Spare parts

Ref. Article	Qty	Ref.	Tubes		Filter with support	Fuse Ø 5 x 20		Power
			Wavelength	W		230 V~ 240 V~	100 V~ 115 V~	
ETX-20.L	6	T-15.L	365nm	15W	FSP-T20.L	2 A	2 A	100 W
ETX-20.M	6	T-15.M	312nm	15W	FSP-T20.CM	2 A	2 A	100 W
ETX-20.C	6	T-15.C	254nm	15W	FSP-T20.CM	2 A	2 A	100 W
ETX-26.M	6	T-15.M	312nm	15W	FSP-T26.CM	2 A	2 A	100 W
ETX-26.C	6	T-15.C	254nm	15W	FSP-T26.CM	2 A	2 A	100 W
ETX-26.MX	6	T-15.M	312nm	15W	FSP-T26.MX	2 A	2 A	100 W
ETX-35.L	6	T-15.L	365nm	15W	FSP-T35.L	2 A	2 A	100 W
ETX-35.M	6	T-15.M	312nm	15W	FSP-T35.CM	2 A	2 A	100 W
ETX-35.C	6	T-15.C	254nm	15W	FSP-T35.CM	2 A	2 A	100 W
ETX-36.M	6	T-15.M	312nm	15W	FSP-T36.CM	2 A	2 A	100 W
ETX-36.C	6	T-15.C	254nm	15W	FSP-T36.CM	2 A	2 A	100 W
ETX-40.M	6	T-15.M	312nm	15W	FSP-T40.CM	2 A	2 A	100 W
ETX-40.C	6	T-15.C	254nm	15W	FSP-T40.CM	2 A	2 A	100 W



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→ Operating instructions

- Place your UV Table on a level working surface,
- 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.

CAUTION : Switch off the fluorescent table when electrophoresis gel is not present on the transilluminator. The fluorescent table should not be kept on "On" for more than 25 minutes without gel. If such is the case, switch off the fluorescent table for 20 minutes before a new utilization. If the filter is too hot, it will damage your electrophoresis gel.

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

CAUTION: When one or several tubes are out of order, the warning tubes flicker for a short moment at the lighting of the UV table. Then all the tubes are automatically switched off by the security device.

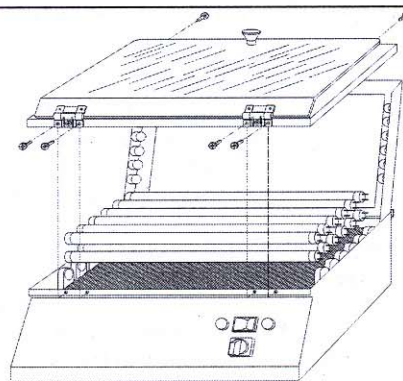
For a better homogeneity, change the 6 tubes simultaneously.

→ Changing the tubes

- a) Before dismantling, **unplug the UV Table**,
- b) Unscrew the 6 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) **CAREFULLY** place the tubes according to their wavelength

IMPORTANT: Reassemble the UV table completely before checking it works correctly.

To reassemble the UV table, follow the above instructions in reverse order. Fuses are located in the plug - see page 4



→ Spare parts

Ref. Article	Qty	Tubes			Filter with support	Starter ST-151 (230/115V) FG-1P (100V)	Fuse Ø 5 x 20		Power
		Ref.	Wavelength	W			230 V~ 240 V~	100 V~ 115 V~	
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-26.LM	6	T-15.L	365nm	15W	FSP-T26.CM	6	3.15 A	4 A	180 W
	6	T-15.M	312nm	15W		6	3.15 A	4 A	
TFX-26.MC	6	T-15.M	312nm	15W	FSP-T26.CM	6	3.15 A	4 A	180 W
	6	T-15.C	254nm	15W		6	3.15 A	4 A	
TFX-26.LC	6	T-15.L	365nm	15W	FSP-T26.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	3.15A	4A	180W
	6	T-15.C	254nm	15W		6	3.15A	4A	



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).

→ Operating instructions

- Place your UV Table on a level working surface,
- Plug the unit into **a properly grounded electrical outlet**,
- To work in "reading" mode, select position 100%, then switch on the on/off switch
- To work in "preparation" mode, select position 70%, then switch on the on/off switch
- After use, select position 0.

CAUTION: Switch off the fluorescent table if not used.

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

CAUTION: When one or several tubes are out of order, the warning tubes flicker for a short moment at the lighting of the UV table. Then all the tubes are automatically switched off by the security device.

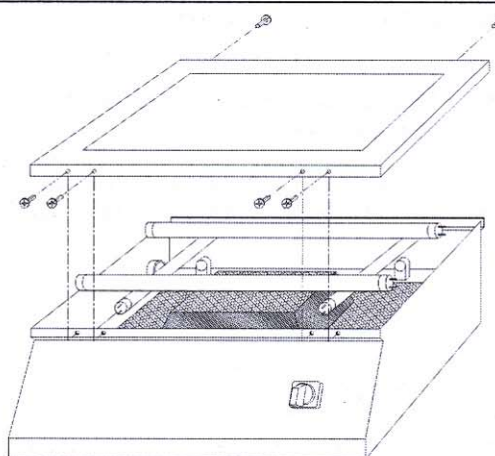
For a better homogeneity, change the 6 tubes simultaneously.

→ Changing the tubes

- a) Before dismantling, **unplug the UV table**,
- b) Unscrew the 6 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 UV table completely before checking its functions correctly.

To reassemble the UV table, follow the above instructions in reverse order. Fuses are located in the plug - see page 4



→ Spare parts

Ref. Article	Qty	Tubes			Filter with support	Starter ST-151 (230/115V) FG-1P (100V)	Fuse Ø 5 x 20		Power
		Ref.	Wavelength	W			230 V~ 240 V~	100 V~ 115 V~	
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	



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→ Operating instructions

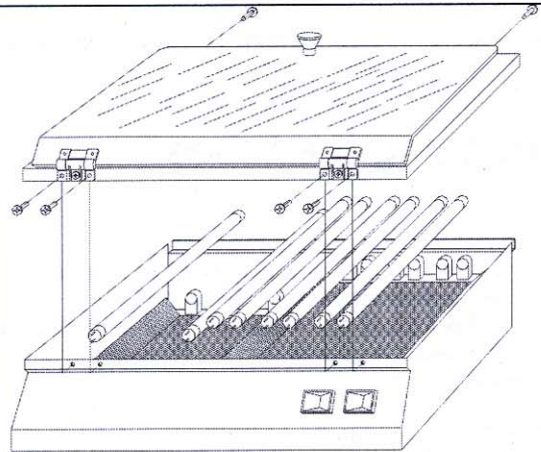
- Place your UV Table on a level working surface,
- Check that your electrical supply is compatible with the voltage of your table,
- Plug the unit into a **properly grounded electrical outlet**,
- Select the type of lighting you require (white light, or ultraviolet),
- Put the ON/OFF switch to the ON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

→ Changing the tubes

- Before dismantling, **unplug the Table**,
- Unscrew the 6 fixing screws on the filter support,
- Remove the filter support,
- Change the 8 tubes and 8 starters (starters are located under the tubes. A quarter turn will release the tubes and the starters).
- 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 4



→ Spare parts

Ref. Article	Qty	Tubes			Filter with support	Starter ST-151 (230/115V) FG-7P (100V)	Fuse Ø 5 x 20		Power
		Ref.	Wavelength	W			230 V~ 240 V~	100 V~ 115 V~	
TFP-C/WL	6	T-8.C	254nm	8W	FSP-CM/WL	6	2 A	3.15 A	100 W
TFP-M/WL	2	T-8.WL	White Light	8W	FSP-CM/WL	2	2 A	3.15 A	100 W
	6	T-8.M	312nm	8W		6	2 A	3.15 A	
TFX-L/WL	2	T-8.WL	White Light	8W	FSP-L/WL	2	2 A	3.15 A	100 W
	6	T-8.L	365nm	8W		6	2 A	3.15 A	
	2	T-8.WL	White Light	8W		2	2 A	3.15 A	



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CERTIFICATE OF REGISTRATION

This is to certify that:

Consort NV
Turnhout

Has been assessed by QualityMasters in respect of its Quality Management System and found to comply with:

NBN EN ISO 9001:2000

Approval is hereby granted for registration providing the rules and conditions relating to certification are observed at all times.

Scope: Production of high-end equipment for electrochemistry and electrophoresis.

Original approval: 2005-08-29

Current certificate: 2005-09-17

Certificate expiry: 2010-08-29

Certificate number: BE-0211-317

Authorized signatory

For QualityMasters Belgium

This certificate remains the property of QualityMasters.