

SPECTROLINE®

NDT

Q-Series

Ultraviolet Lamps

OPERATOR'S MANUAL



SPECTRO-UV

www.Spectro-UV.com

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 **DANGER**

Ultraviolet radiation emitted from this product. Avoid exposure. **ALWAYS WEAR PROTECTIVE CLOTHING. EXPOSURE MAY CAUSE PREMATURE AGING OF THE SKIN AND CANCER. ALWAYS WEAR PROTECTIVE EYEWEAR; FAILURE TO DO SO MAY RESULT IN SEVERE BURNS OR LONG TERM INJURY TO EYE.** Never look directly into the lamp. Exposure can cause eye and skin allergy and allergic reactions. Medications or cosmetics may increase your sensitivity to ultraviolet radiation. Consult physician before operating this product if you are using medications or have a history of skin problems or believe yourself especially sensitive to sunlight.

FOR LABORATORY USE ONLY

UNPACKING AND INSPECTION

1. Carefully unpack and inspect the lamp for possible damage in shipment. If any damage is noted, immediately notify the carrier and supplier before attempting to use the lamp.
2. Save the shipping carton and packing materials for future storing and shipping of the lamp.
3. Check the lamp's electrical performance as soon as possible according to the GENERAL FUNCTIONAL CHECKS outlined below.

NOTE: When unpacking a lamp equipped with a flexible arm, use caution while cutting the plastic tie securing the two major sections of the arm together. The tension created by the springs will cause the sections to separate quickly. Hold both sections of the arm firmly while cutting the tie and release them slowly.

 **WARNING**

Please read the instructions in this manual carefully before using your Spectroline® Q-Series lamp. Never use this lamp in any manner not specified in these instructions because the protection provided by the lamp may be impaired. We recommend using Spectroline UV-absorbing protective eye and face wear. See Replacement Parts and Accessories for model numbers. This eye and face wear also improves contrast between the fluorescent area and the background and eliminates "blue haze" interference.

GENERAL FUNCTIONAL CHECKS

1. Connect the plug to a power outlet that complies with the electrical requirements specified on the lamp's label.
2. The power supply cord is the disconnect for this lamp.
3. Depress the POWER ON switch for approximately 5 seconds. For a lamp with two wavelengths, only one switch may be operated at a time. For a lamp with four long wave UV-A tubes, use both POWER ON switches to activate all four tubes.

4. 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.
5. To turn the lamp off, depress the red POWER OFF switch(es).

INSTALLING ACCESSORIES

1. To attach a lamp to the SQ-130 pedestal stand, place the stand on a level surface. Slide the open end of the lamp handle onto the stand receptacle. Do not force the handle onto the stand or it will lodge too tightly and be difficult to remove. Adjust the lamp vertically to achieve the most comfortable viewing position.
2. To mount a lamp equipped with a flexible arm, attach the mounting bracket provided to the bench, table or wall away from obstructions to allow for mobility of the lamp. Insert the arm into the bracket and adjust the lamp horizontally and vertically as desired.

OPERATOR SERVICING

The following servicing instructions are intended for limited maintenance of the lamp. Do not perform any servicing other than that contained in these instructions. Return the lamp to the factory for other maintenance not covered in this section.

WARNING

To avoid the risk of electrical shock, always unplug the lamp from its power source before cleaning or servicing.

HOUSING AND MAGNIFIER LENS MAINTENANCE

The polycarbonate lamp housing protects the internal parts. Immediately clean spills from the housing and magnifier lens with water and a mild detergent and wipe dry with a soft cloth. Do not allow any liquids to leak into electrical components. Periodically clean the lens with a glass cleaner and a soft cloth.

TUBE AND REFLECTOR MAINTENANCE

To clean the tubes and/or reflector, see the "TUBE REPLACEMENT" section. Using a soft cloth, the reflector may be cleaned with a glass cleaner, while the tubes may be cleaned with a mild detergent solution. Wipe dry with a soft cloth.

SHORT WAVE FILTER MAINTENANCE

To clean the filter, remove the two screws holding the filter assembly and slide it off the open end of the lamp housing. Clean with a soft cloth and a glass cleaner.

TUBE REPLACEMENT

When replacing a tube, unplug the lamp from its power source before proceeding.

1. Lay the lamp housing on a flat, level surface with the tubes facing up. For lamps without a filter assembly, proceed to step #3.
2. Remove the two screws holding the filter assembly and slide it off the open end of the lamp housing and set it aside.

3. Grasp the tube by the metal bases located at each end. Applying even pressure, gently rotate the tube a quarter turn until it loosens. The tube may now be easily removed from its sockets.
4. Install the new tube by reversing the above procedure.
5. If installation of the new tube fails to yield correct lamp operation, check to make sure the two pins at each end of the tube are properly connected with the two copper contacts in each socket.

NOTE: The tubes in all Q-Series lamps are wired in series. Therefore, if one tube fails the other tube of the same wavelength will not light, even though it may be in good operating condition.

FILTER ASSEMBLY REPLACEMENT

Remove the two screws holding the filter assembly and slide it off the open end of the lamp housing. Carefully install the new filter assembly by reversing this procedure.

ENVIRONMENTAL SPECIFICATIONS

The Spectroline Q-Series lamps are designed to be safe under the following conditions:

- Indoor use;
- Altitude up to 2,000 m (6,562 ft.);
- Temperature 5°C to 40°C (41°F to 104°F);
- Maximum relative humidity 80% for temperatures up to 31°C (88°F), decreasing linearly to 50% relative humidity at 40°C (104°F);
- Mains supply voltage fluctuations not to exceed $\pm 10\%$ of the nominal voltage;
- Installation Category II;
- Pollution Degree 2

ELECTRICAL SPECIFICATIONS

MODEL	WAVELENGTH	NO. TUBES	EQUIPPED WITH	AMPS
Q-12	UV-A	2		0.2
Q-12NF	UV-A/UV-C	1/1	SHORT WAVE FILTER ASSEMBLY	0.2
Q-12SNF	UV-A/UV-C	1/1	Q-12NF WITH PEDESTAL STAND/ SW Filter	0.2
Q-12S	UV-A	2	Q-12 WITH PEDESTAL STAND	0.2
Q-22	UV-A/WHITE	2/2		0.2
Q-22B	UV-A	4		0.4
Q-22SB	UV-A	4	Q-22 WITH PEDESTAL STAND	0.4
Q-22FA (B-4)	UV-A/WHITE	2/2	FLEXIBLE ARM/ BENCH BRACKET	0.2
Q-22FA (T-4)	UV-A/WHITE	2/2	FLEXIBLE ARM/ TABLE MOUNT	0.2
Q-22FA (W-4)	UV-A/WHITE	2/2	FLEXIBLE ARM/ WALL MOUNT	0.2
Q-22FAB (B-4)	UV-A	4	FLEXIBLE ARM/ WALL MOUNT	0.4
Q-22FAB (T-4)	UV-A	4	FLEXIBLE ARM/ TABLE MOUNT	0.4
Q-22NF	UV-A/UV-C	2/2	SHORT WAVE FILTER ASSEMBLY	0.2
Q-22SNF	UV-A/UV-C	2/2	Q-22NF WITH PEDESTAL STAND/ SW FILTER	0.2
Q-22S	UV-A/WHITE	2/2	Q-22 WITH PEDESTAL STAND	0.2

All Domestic models are 120V/60Hz.

Housing dimensions W x L x H: 5.75 x 2.25 in (14.6 x 17.8 x 5.7 cm).

All tubes are 4 Watt. The UV-A tubes are integrally filtered; the UV-C units feature a LONGLIFE™ filter assembly.

Long Wave (UV-A): 365nm

Short Wave (UV-C): 254nm

REPLACEMENT PARTS & ACCESSORIES

Description	Part No.
Tube - Long Wave UV-A	BLE-220B
Tube - White Light	BLE-95D
Tube - Short Wave UV-C	BLE-2537S
LONGLIFE™ Filter Assembly - Short Wave UV-C	370B
Pedestal Stand	SQ-130
Mounting Brackets—for Flexible Arm Models:	
Bench Mount	B-4
Table Mount	T-4
Wall Mount	W-4
Spectacles, UV-Absorbing	UVS-30
Goggles, UV-Absorbing	UVG-50
Face Shield, UV-Absorbing	UVF-80

WARRANTY

The warranty policy for the Q-Series lamps is provided on the Certificate of Limited Warranty enclosed separately with each unit.

NOTE: For assistance of any kind, including help with a lamp under warranty, contact the Customer Service Department at Spectron-UV. In the U.S. and Canada, call toll-free 1-886-230-7305. Include the model and serial numbers of the unit and the date of purchase. Shipping instructions will be provided if necessary.

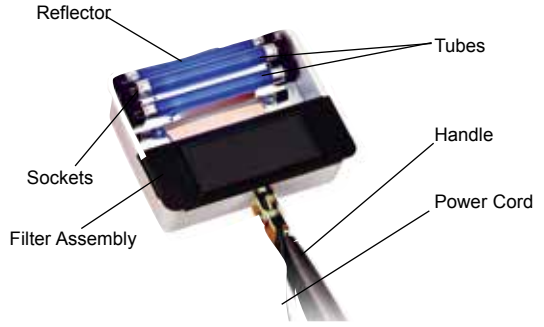
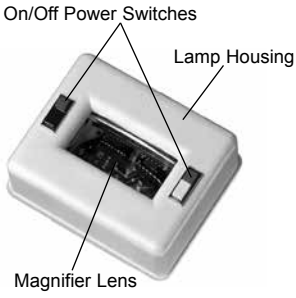
If an estimate of charges for nonwarranty work or other service work is required, a quote will be furnished upon evaluation of the unit. Service work will not be performed without customer approval.

SHIPPING

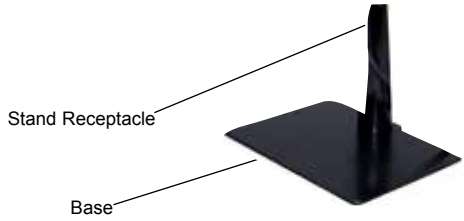
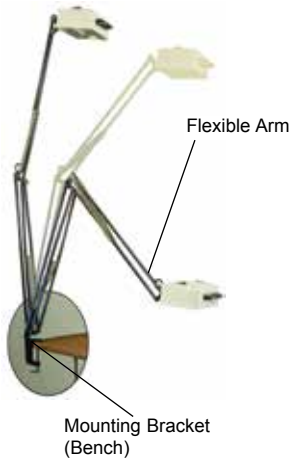
Carefully pack the lamp in the original shipping container and packing materials. Insure it for full value and ship it prepaid to the factory.



LAMP CONTAINS MERCURY
Manage in Accord with Disposal Laws
See: www.lamprecycle.org



ACCESSORIES



SQ-130 Pedestal Stand



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