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section 1

INTRODUCTION

Thank you for selecting the Martin FiberSource Q150. The FiberSource is a rugged and efficient light specially designed for illuminating fiber optics.

Features

- Long-life Osram HQI-R 150 W discharge lamp
- Multi-cable adapter for 50 to 300 optic fibers
- Coated cold light reflector and combined UV/heat filter for cool and safe light.
- Diffusion filter for even light distribution
- Built-in slot for an optional color or CTC filter
- Thermo-switch for overheating protection
- Super-quiet fan cooling

About this manual

Please familiarize yourself with this manual before using the FiberSource Q150. Electricity and ultraviolet light are dangerous if handled incorrectly. Please follow the precautions listed in section 2 and observe the warnings printed on the fixture. If you have any doubts about how to operate or service the fixture safely, please contact your Martin dealer for assistance before proceeding.

Please refer any service not described in this manual to a qualified technician.
section 2

SAFETY PRECAUTIONS

- The *FiberSource Q150* is NOT for domestic use.
- Read user manual before connecting or operating the fixture.
- Always completely disconnect the fixture from electricity and allow to cool for 5 minutes when:
  - Removing any part, including the fiber adaptor, from the fixture.
  - Replacing the lamp or fuse.
  - Changing the ballast settings.
- To reduce risk of fire and electrical shock, do NOT expose to rain or moisture.
- Keep flammable materials at least 0.1 meters (4 inches) from the fixture.
- Do NOT block fan or exhaust vents.
- Do NOT operate the fixture with the fiber optic cable, filters, or any other parts removed: discharge lamps operate under pressure and can explode, and an unshielded lamp emits dangerous UV radiation that can cause burns and eye damage.
- Check voltage and frequency settings before applying power.
- Ensure that the fixture is properly grounded (earthed).
- Do NOT operate the fixture if the ambient temperature ($t_a$) exceeds 40°C (104°F).
- Refer service operations not described in this manual to a qualified technician.
section 3

SETUP

The FiberSource Q150 includes:

- IEC power cable
- User manual
- Osram HQI-R 150 W discharge lamp

Installing the lamp

The FiberSource Q150 is designed to work exclusively with the Osram HQI-R 150 W discharge lamp. Do not install any other type of lamp. The FiberSource Q150 ships from the factory with the lamp installed in the ideal burning position when the fixture sits on a level surface. The lamp must be turned so the wires point toward the ground if the fixture is mounted on a wall or ceiling.

As the quartz envelope weakens with use and may eventually burst, lamp replace-
ment is recommended after 6000 hours of use.

Avoid touching the glass bulb. Oils from your fingers will shorten the lamp life. To remove oils, use a soft cloth and denatured alcohol.

1. Disconnect the fixture from electricity and allow it to cool for 5 minutes.
2. Remove the 4 cover screws and lift off the cover.
3. To remove a lamp, disconnect the lamp wires, place your fingers under the reflector and gently lift out the lamp. **Lifting by the ceramic base may break the lamp.**
4. Position the lamp behind the diffusion filter. Turn it so the wires will point toward the ground when the fixture is permanently installed. This positions the filament in the ideal horizontal burning position.
5. Gently guide the lamp between the springs.
6. Plug the lamp wires into the white connector.
7. Turn the diffusion filter 90°, if necessary, so the long sides of the prisms align with the filament. See filter placement sketch below.

**Mounting the fixture**

*The FiberSource Q150 must be positioned such that the lamp filament is horizontal.*

It may be mounted on a wall so long as the lamp is not vertical. The fixture may be secured by the 4 mounting holes in the base.

*The FiberSource Q150 gets hot.* Install it in a dry area where there is -

- no danger of accidentally touching it,
- at least 10 cm (4 in) clearance around the fixture,
- good circulation,
- no flammable material nearby.

**Checking voltage and frequency settings**

The *FiberSource Q150* voltage setting must be within 5% of the AC mains supply. The voltage setting may be adjusted to local conditions. The frequency (50 or 60 Hz depending on model), however, must match your supply. Check the settings printed on the label on the back of the fixture. See section 4 to change the ballast voltage setting.
Inserting fiber optic cable

Fiber optic cables of 50 to 300 1 mm fibers may be attached to the FiberSource Q150 using the specially designed fiber optic cable adaptor. Please refer to the instructions with the cable adaptor. The correct adaptor position within the shaft depends on the number of fibers.

1. Slide the adaptor into the shaft until the edge of the groove closest to the wide end of the adaptor (see below) aligns with the face of the adaptor shaft.

   If, for example, there are 100 fibers, then count to the 7th groove from the wide end and insert the adaptor until the groove just disappears and the edge is even with the face of the female fitting.

2. Tighten the set screw.
Installing a plug on the power cord

WARNING!
The fixture must be grounded (earthed).

The FiberSource Q150 may be delivered without a plug on the power cord. A minimum 8 A, 3-prong grounding-type plug must be installed. Following the manufacturer’s instructions -

1. Connect the BROWN wire to the LIVE pin.
2. Connect the BLUE wire to the NEUTRAL pin.
3. Connect the YELLOW/GREEN wire to the GROUND (EARTH) pin.

The FiberSource Q150 is ready for operation. To use, connect the power cord to the socket on the back of the FiberSource Q150 and AC power.

Inserting a color filter

The color of the light may be altered by inserting a 52 mm square dichroic glass color or temperature correction filter. See appendix c for a list of available colors. The FiberSource Q150 has a slot for 1 filter.

1. Disconnect the FiberSource Q150 from electricity and allow to cool.
2. Remove the 4 cover screws and lift off the cover.
3. Guide the filter into the slot in front of the UV/heat filter. See sketch below.
4. Replace the cover.
WARNING!

Dangerous voltages. Ensure the fixture is isolated from electricity before removing the cover.

Changing the ballast voltage

1. Unplug the FiberSource Q150 and allow it to cool.
2. Remove the 4 cover screws and lift off the cover.
3. Remove the ballast cover plate.
4. Remove the black wire from the ballast terminal: insert a small screwdriver in the small hole under the terminal and release the spring with a clockwise turn.
5. Open the spring as above for the correct terminal and insert the black wire. The terminals are marked on the side of the ballast.
6. Replace the ballast cover plate.
7. Replace the cover.

Replacing the fuse

1. Unplug the power cord from the fixture.
2. Place the tip of a screwdriver in the slot on top of the fuse holder and pry open the holder.
3. Replace the fuse with one of the same rating. The rating is shown on the label.
4. Replace the fuse holder and reconnect the power cord.
## Troubleshooting

<table>
<thead>
<tr>
<th>Problem</th>
<th>Probable Cause(s)</th>
<th>Suggested Remedy</th>
</tr>
</thead>
<tbody>
<tr>
<td>No light and the fan does not run.</td>
<td>No power to the fixture. Blown fuse.</td>
<td>• Check connections. • Replace fuse.</td>
</tr>
<tr>
<td>Fan runs but there is no light.</td>
<td>Lamp too hot to strike. Incorrect voltage setting. Burned out lamp. Fixture overheating.</td>
<td>• Wait a few minutes. Lamp will strike when cool. • Check and correct voltage setting. • Install new lamp. • Allow to cool. • Improve air flow. • Clean the fan.</td>
</tr>
<tr>
<td>Poor or uneven light.</td>
<td>Adaptor installed incorrectly. Rough fiber ends. Lamp filament oriented incorrectly.</td>
<td>• Adjust adaptor as described in section 3. • File fiber ends smooth as described in adapter installation. • Turn lamp so wires point toward the ground.</td>
</tr>
</tbody>
</table>

If the suggested remedies do not solve the problem, contact your Martin dealer for service.
appendix b

SPECIFICATIONS

Dimensions
• Length ................................................................. 230 mm (9.1 in)
• Width ................................................................. 317 mm (12.5 in)
• Height ................................................................. 139 mm (5.5 in)
• Weight ................................................................. 5 kg (11 lb)

Electrical
• Power consumption .................................................. 180 W
• Current consumption, EU model .................................. 0.9 A at 230 V
• Current consumption, US model .................................. 1.0 A at 220 V
• Ballast taps, EU model .............................................. 230/240/250 V
• Ballast taps, US model .............................................. 220/230 V
• AC frequency, EU model ............................................ 50 Hz
• AC frequency, US model ............................................ 60 Hz
• Fuse ................................................................. 3.15 AT / 250 V

Source
• Lamp ................................................................. Osram HQI-R discharge
• Power ................................................................. 150 W
• Burning angle ...................................................... horizontal with wires down
• Rated average life ................................................... 6000 h
• Color temperature ................................................... 4200K
• Output*, 10 mm diameter ........................................ 1850 lm
• Output*, 20 mm diameter ........................................ 4000 lm
• Output*, 25 mm diameter ........................................ 5200 lm
* Does not include filter and cable loss.

Construction
• Housing .............................................................. steel and aluminum
• Finish ............................................................... electrostatic powder coating

Thermal
• Cooling method .................................................... forced air
• Surface temperature under normal conditions ........... 65° C (150° F)
• Maximum operating environment temperature ........... 40° C (104° F)
• Protection .......................................................... thermo-switch
## Appendix C

### ACCESSORIES AND REPLACEMENT PARTS

#### 52 x 52 x 1.1 mm color filters

<table>
<thead>
<tr>
<th>Color</th>
<th>P/N</th>
<th>Color</th>
<th>P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>3500 - 5600K CTC</td>
<td>392692</td>
<td>5500 - 3400K CTC</td>
<td>392654</td>
</tr>
<tr>
<td>Red 301</td>
<td>392655</td>
<td>Blue 101</td>
<td>392658</td>
</tr>
<tr>
<td>Red 304</td>
<td>392684</td>
<td>Blue 102</td>
<td>392659</td>
</tr>
<tr>
<td>Red 305</td>
<td>392685</td>
<td>Blue 103</td>
<td>392660</td>
</tr>
<tr>
<td>Red 308</td>
<td>392686</td>
<td>Blue 104</td>
<td>392661</td>
</tr>
<tr>
<td>Red 309</td>
<td>392687</td>
<td>Blue 105</td>
<td>392662</td>
</tr>
<tr>
<td>Green 201</td>
<td>392667</td>
<td>Blue 106</td>
<td>392663</td>
</tr>
<tr>
<td>Green 202</td>
<td>392668</td>
<td>Blue 107</td>
<td>392657</td>
</tr>
<tr>
<td>Green 203</td>
<td>392669</td>
<td>Blue 108</td>
<td>392664</td>
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<tr>
<td>Green 204</td>
<td>392670</td>
<td>Blue 111</td>
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<tr>
<td>Green 205</td>
<td>392671</td>
<td>Orange 302</td>
<td>392677</td>
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<tr>
<td>Green 206</td>
<td>392666</td>
<td>Orange 306</td>
<td>392678</td>
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<tr>
<td>Green 208</td>
<td>392672</td>
<td>Purple 302</td>
<td>392682</td>
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<tr>
<td>Magenta 501</td>
<td>392673</td>
<td>Purple 309</td>
<td>392683</td>
</tr>
<tr>
<td>Magenta 504</td>
<td>392674</td>
<td>Cyan 401</td>
<td>392666</td>
</tr>
<tr>
<td>Magenta 505</td>
<td>392675</td>
<td>Yellow 601</td>
<td>392688</td>
</tr>
<tr>
<td>Magenta 507</td>
<td>392676</td>
<td>Yellow 602</td>
<td>392689</td>
</tr>
<tr>
<td>Pink 303</td>
<td>392679</td>
<td>Yellow 603</td>
<td>392690</td>
</tr>
<tr>
<td>Pink 307</td>
<td>392680</td>
<td>Yellow 604</td>
<td>392691</td>
</tr>
<tr>
<td>Pink 312</td>
<td>392681</td>
<td>1/2 minus green</td>
<td>392694</td>
</tr>
</tbody>
</table>
### Fiber optic cables

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Emission</th>
<th>Diameter</th>
<th>1 mm fibers</th>
</tr>
</thead>
<tbody>
<tr>
<td>OFIB01</td>
<td>side</td>
<td>3/16”</td>
<td>4.8 mm</td>
</tr>
<tr>
<td>OFIB02</td>
<td>side</td>
<td>5/16”</td>
<td>7.9 mm</td>
</tr>
<tr>
<td>OFIB03</td>
<td>side</td>
<td>7/16”</td>
<td>11.1 mm</td>
</tr>
<tr>
<td>OFIB04</td>
<td>side</td>
<td>9/16”</td>
<td>14.3 mm</td>
</tr>
<tr>
<td>OFIB05</td>
<td>end</td>
<td>3/16”</td>
<td>4.8 mm</td>
</tr>
<tr>
<td>OFIB06</td>
<td>end</td>
<td>5/16”</td>
<td>7.9 mm</td>
</tr>
<tr>
<td>OFIB07</td>
<td>end</td>
<td>7/16”</td>
<td>11.1 mm</td>
</tr>
<tr>
<td>OFIB08</td>
<td>end</td>
<td>9/16”</td>
<td>14.3 mm</td>
</tr>
</tbody>
</table>

### Other accessories
- Fiber adaptor kit.................................................................P/N 919302

### Replacement parts
- Osram HQI-R 150 W discharge lamp .................................P/N 346037
- 3.15 AT fuse .................................................................P/N 350003