# SurgiTel® Systems

## **HLT200**

## OPERATING MANUAL FOR THE **HLT 200** LIGHT SOURCE

Thank you for purchasing our **200 Watt Quartz Halogen Light Source**. This compact yet powerful light source will provide many years of quality service.

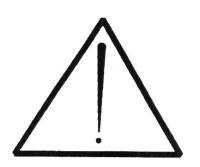
The features of the HLT 200 include:

- Powerful 200-watt quartz halogen lamp.
- **Photobloc Filter**, when flipped into position, blocks out blue light.
- Thermostatically controlled fan keeps the interior of the light source cool.
- Small & Lightweight, the HLT 200 takes up little room in your office or clinic.
- New Max Light Illumination/Max Lamp Life Switch on the rear of the unit. Max Illumination position runs the lamp at its rated voltage delivering maximum brilliance. Max Lamp Life position allows doubling of the lamp life (by running the lamp slightly under its rated voltage) while still delivering excellent brilliance.

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## Warnings, Care, Use and Maintenance of the HLT 200

To ensure proper operation and to obtain the maximum results from the Light Source this manual should be read in its entirety.



1) WARNING: THE LIGHT SOURCE IS ENERGIZED WHEN THE LINE CORD IS CONNECTED.

ADVERTISSMENT: LA SOURCE DE LURNIERE EST DONNEE L'ENERGIE LORSQUE LA CORDE DE LIGNE EST BRANCHEE.

ACHTUNG!: BEI ANSCHLUβ DES GERATESTECKERS STEHT LICHTQUELLE UNTER NETZSPANNUNG.

2) INSTRUCTIONS FOR CHANGING THE BULB ARE FOUND ON PAGE 5.



3) CAUTION: HOT

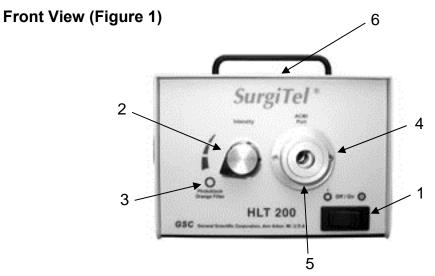
**ATTENTION: TE CHAUD!** 

**VORSICHT: HEB** 



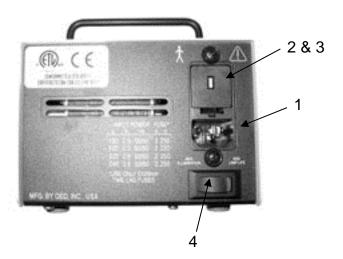
4) TYPE "B" EQUIPMENT

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- 1. On/Off Switch
- 2. Manual Intensity Control
- 3. Photobloc Filter Position
- 4. ACMI Port (interchangeable port)
- 5. Screw for Port Release
- 6. Tool operated door for lamp access (on top of unit)

## Rear View (Figure 2)



- 1. Power Cord input
- 2. Fuse Drawer
- 3. Voltage Selector (Preset see page 7)
- Maximum Illumination/Maximum Lamp Life Switch

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- 1. The HLT 200 Light Source should be inspected when received to ensure that no damage resulted from shipment and that all necessary parts are included.
- 2. The HLT 200 Light Source should be disconnected from the wall outlet anytime changes are made to the voltage, port or during lamp replacement.
- 3. Avoid touching the surface of the Quartz Halogen lamp when the unit is on or until the lamp has cooled for a minimum of 10 minutes after disconnecting the power.
- 4. If malfunctions develop with the HLT 200 Light Source other than a burned out lamp or fuses, the problem should be referred to:

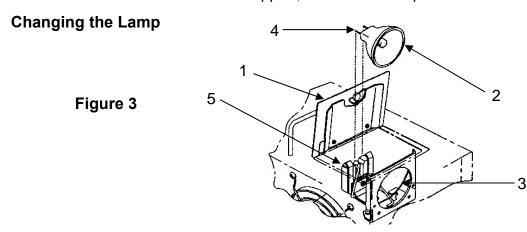
General Scientific Corporation Customer Service Department 77 Enterprise Drive Ann Arbor, MI 48103 800-959-0153 or 734-996-9200

- 5. The HLT 200 Light Source is designed as Class I Equipment.
- 6. THE HLT 200 LIGHT SOURCE IS NOT TO BE USED IN THE PRESENCE OF FLAMMABLE ANESTHETICS.
- 7. THIS PIECE OF EQUIPMENT IS NOT INTENDED FOR USE IN THE IMMEDIATE PATIENT VACINITY.
- 8. The HLT 200 Light Source should be kept free of dust and dirt. The area around the unit should be free of any blockages or obstructions.
- 9. The outside surface of the unit may be cleaned with a damp (**NOT WET**) cloth and a mild detergent.

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## **Operating Instructions**

- 1. Make sure the Voltage Selector is set to the proper input voltage. (See page 7)
- 2. Connect the power cord at input at rear of Light Source. (Figure 2, item 1)
- 3. Plug the power cord into a wall outlet.
- 4. Insert your Fiber Optic Cable into the port. (Figure 1, item 4)
- 5. Turn on the lamp with the On/Off switch. (Figure 1, item 1)
- 6. The thermostatically controlled fan will activate when the interior has reached the predetermined temperature.
- 7. Select the level of illumination with the Manual Intensity Control (MIC) knob. (Figure 1, item 2)
- 8. If desired, flip the Photobloc filter into place by turning the Manual Intensity Control knob one click past the point of Maximum Illumination.
- 9. When the procedure is finished turn the lamp off with the On/Off switch. (Figure 1, item 3)
- 10. The thermostatically controlled fan will continue to operate until the interior has reached the predetermined temperature.
- 11. When the fan has stopped, disconnect the power cord from the wall outlet.



#### **USE ONLY EJL LAMPS**

- 1. Turn off the light using the On/Off switch. (Figure 1, item 1)
- 2. ALLOW THE LAMP TO COOL. (10 MINUTE MINIMUM COOL TIME)
- 3. Unplug the unit from the wall outlet.
- 4. Open the access door. (Figure 3, item 1 above)
- 5. Push the lever (Figure 3, item 3) toward the rear of the light source. This will raise the lamp out of the base.
- 6. Remove the lamp (Figure 3, item 4) from the light source.
- 7 Re-position the lever to the forward position.
- 8. Fit the lamp rim into the wire guides (Figure 3, item 4) and slide the posts (Figure 3, item 5) at the rear of the lamp into the slots (Figure 3, item 5) of the ceramic base.
- 9. Gently push the lamp down until it is seated in the ceramic base.

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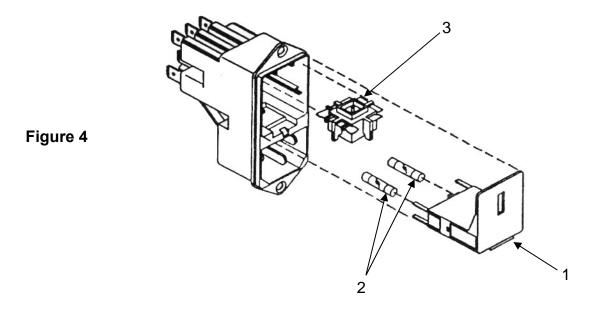
## Replacing the Port

- 1. Turn off the light using the On/Off switch (Figure 1, item 1) and disconnect the power cord.
- 2. Using a small screw standard screwdriver, loosen the screw located under the port. (Figure 1, item 5)
- 3. Remove the existing port.
- 4. Reverse this procedure to connect a new port.

## Changing the Fuse

If the Light Source will not function and the wall outlet is working properly, check the fuses located at the rear of the Light Source.

- 1. Turn off the light using the On/Off switch (Figure 1, item1) and disconnect the power cord from the wall outlet and from the Light Source.
- 2. To remove the fuse drawer push up on the tab (Figure 4, item 1) with a tool (a small screwdriver works well) and pull the drawer out from the rear of the Light source.
- 3. If needed, replace the fuses with 5 X 20mm Time Lag fuses.
- 4. Select the proper current rating for the fuse by referring to the instructions printed on the rear panel of the Light Source. (See Figure 2)
- 5. Slide the fuse drawer back into position and press inward until it "Clicks" into position.
- 6. If these conditions are satisfied and the light source fails to operate, disconnect the power cord and contact **SurgiTel® Systems'** Customer Service department at 1-800-959-0153 or 734-996-9200.



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### **Changing the Voltage**

The voltage in the Light Source is set to the voltage of the country to which it has been shipped. If it is necessary to change the voltage, follow these instructions:

- 1. Remove the fuse drawer as described above in "Changing the Fuse".
- 2. Slide the Voltage Selector Insert (Figure 4, item 3) out of the housing by pulling it toward you.
- 3. Find the side that corresponds to the voltage you are seeking.
- 4. The number indicating the voltage should read in the direction shown in the picture (facing the right).
- 5. Slide the Voltage Selector Insert back into the drawer and press inward until it clicks into position.
- 6. Replace the fuse drawer and press inward until it clicks into position.

NOTE: THE HLT 200 CONTAINS AN 'OVER TEMPERATURE SAFETY DEVICE' TO PREVENT EXCESSIVE HEAT BUILD UP IN THE EVENT OF A FAN FAILURE. THE UNIT WILL TURN OFF IF THE LIGHT SOURCE EXCEEDS A PREDETERMINED MAXIMUM INTERIOR TEMPERATURE. THE SAFETY SWITCH WILL AUTOMATICALLY RESET ONCE THE INTERIOR HAS COOLED. TO AVOID FURTHER DAMAGE TO THE UNIT, IT IS MOST IMPORTANT TO TURN THE UNIT OFF AND DISCONNECT THE POWER CORD. CONTACT Surgite!® Systems' CUSTOMER SERVICE AT 1-800-959-0153 OR 734-996-9200.

## **Product Specifications:**

SIZE: L 7 ½" X W 5 ½" X H 4 1/8"

190.9mm X 139.7mm X 104.7mm

WEIGHT: 6 ¾ Lbs.

3.06 Kg

VOLTAGE: 100V-240V, 50/60 Hz

LAMP: EJL 200 Watt quartz Halogen

## The HLT 200 (QED200) has the following certifications:

ETL Certified to UL 2601 cETL Certified to CAN/CSA C22.2 No.601.1 EN 55011 (CISPR 11) IEC 801-2 & 4 IEC 801-3 IEC 801-5

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