

## Noise-free Halogen Lamp with Tabletop Controller Model SUN-1

Thank you for your purchase of the **SUN-1** lamp with controller. This device is well made and will provide years of trouble free use.

#### **Notes**

Please consider the following notes when using the **SUN-1**:

- The lamp houses a dichroic reflector which dissipates ~60% of the heat generated by the bulb. Consequently, the sample is exposed to less radiant heat at the expense of a warmer lamp head. Use care when making adjustments to the lamp as it may be very warm to the touch.
- The power to the lamp, as well as its brightness, is exclusively controlled by the controller. The switch at the base of the gooseneck is non-functional.
- A dual function rack mount controller is available.

### **Assembly**

- 1. The lamp is shipped with separate magnetic base. Attach the magnetic base to the bottom of the lamp assembly using the four supplied screws.
- 2. Verify that the bulb and reflector are firmly seated in the lamp head. If adjustment is necessary, remove the shield assembly by unscrewing it from the lamp head. The exposed bulb can then be easily accessed.
- Place the lamp into position in the cage. Run the <u>lamp cable</u> to the control unit and plug it into its connector.
- 4. **IMPORTANT:** Make two ground connections to assure quiet operation. If these connections are not made the lamp will radiate EMF into your Faraday cage.
  - Make a connection from the <u>GREEN BANANA JACK on the lamp controller</u> to the common ground of your setup (usually the circuit ground on the amp)
  - Make a connection from the <u>base of the lamp</u> to the common ground inside of your Faraday cage (usually the brass block).
- Plug the power adaptor into a convenient wall a plug, power the device, and test for operation.

### **Specifications**

Lamp: High impact polyamide housing; swivel head; spot reflector;

clear lens, Halogen bulb, dichroic reflector; 12W-12V

Gooseneck: 1.4 cm dia. x 30.5 cm length; with PVC sleeve

Tabletop Controller: Eight position with on/off switch; 120 V wall mount adapter

Replacement parts

SUN-DCH Replacement 12W-12V Dichroic bulb for SUN-1 lamp

# **Declaration of Conformity**

CE MARKING (EMC)

## **Application of Council Directive: 89/336/EEC**

Standards To Which Conformity

EN55022 Class A

Is Declared:

EN61000-3-2

EN61000-3-3

EN50082 1:1002

EN50082-1:1992 EN61000-4-2 EN61000-4-3 ENV50204 EN610000-4-4 EN610000-4-8 EN610000-4-11

Manufacturer's Name: Warner Instruments, LLC

Manufacturer's Address: 1125 Dixwell Avenue

Hamden, CT 06514 Tel: (203) 776-0664

Equipment Description: Halogen Light Source

Equipment Class: ITE-Class A

Model Numbers: SUN-1

I the undersigned, hereby declare that the equipment specified above, conforms to the above Directive(s) and Standard(s).

Place: Hamden, Connecticut USA

Signature:

Full Name: Burton J. Warner

Position: President

# Declaration of Conformity

CE MARKING (LVD)

## **Application of Council Directive: 73/23/EEC**

Standards 10 which Conformity Is	EN01010-1:1993
Declared:	

Manufacturer's Name: Warner Instruments, LLC

Manufacturer's Address: 1125 Dixwell Avenue
Hamden, CT 06514

Hamden, CT 06514 Tel: (203) 776-0664

Equipment Description: Halogen Light Source

Safety requirements for electrical equipment for measurement and

laboratory use

Equipment Class: Class I

Model Numbers: SUN-1

I the undersigned, hereby declare that the equipment specified above, conforms to the above Directive(s) and Standard(s).

Place: Hamden, Connecticut USA

Signature:

Full Name: Burton J. Warner

Position: President

## WEEE/RoHS Compliance Statement

### EU Directives WEEE and RoHS

#### To Our Valued Customers:

Harvard Apparatus is committed to being a good corporate citizen. As part of that commitment, we strive to maintain an environmentally conscious manufacturing operation. The European Union (EU) has enacted two Directives, the first on product recycling (Waste Electrical and Electronic Equipment, WEEE) and the second limiting the use of certain substances (Restriction on the use of Hazardous Substances, RoHS). Over time, these Directives will be implemented in the national laws of each EU Member State.

Once the final national regulations have been put into place, recycling will be offered for those Harvard Apparatus products which are within the scope of the WEEE Directive. Products falling under the scope of the WEEE Directive available for sale after August 13, 2005 will be identified with a "wheelie bin" symbol.

Two Categories of products covered by the WEEE Directive are currently exempt from the RoHS Directive – Category 8, medical devices (with the exception of implanted or infected products) and Category 9, monitoring and control instruments. Most of Harvard Apparatus' products fall into either Category 8 or 9 and are currently exempt from the RoHS Directive. Harvard Apparatus will continue to monitor the application of the RoHS Directive to its products and will comply with any changes as they apply.





- Do Not Dispose Product with Municipal Waste.
- Special Collection/Disposal Required.