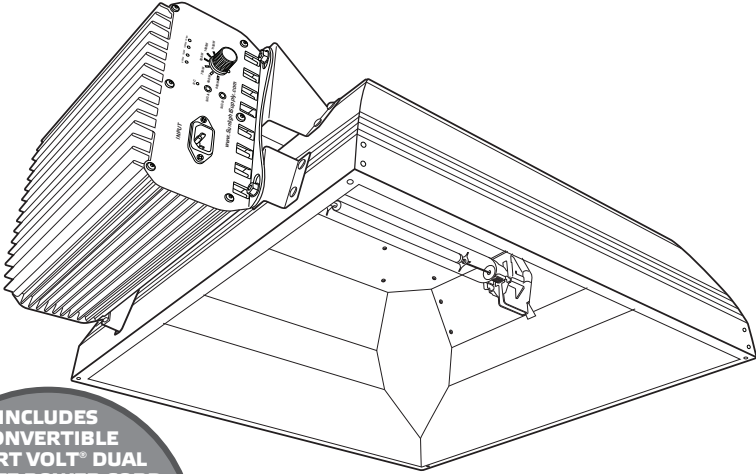


Sun System® 1000 DE® BOSS COMMERCIAL FIXTURE

Installation/Operating Instructions



**E TELLIGENT
CONTROLLER**
compatible

Sun System® 1 Ballasts are controller-compatible with signal ports for on/off/dimming functions (Eteligent™ controller - Part # 902245 sold separately)

Product # 906610 Sun System® 1000 DE® BOSS Commercial Fixture 120V-240V

READ THESE INSTRUCTIONS BEFORE FIRING UP YOUR BALLAST

KEEP ORIGINAL PACKAGING— all returns need to be in the original packaging in order to avoid product damage during shipping. Any damage to products not in their original packaging will not be covered under warranty.

SAFETY FIRST! Failure to observe the following safety warnings may result in serious injury. In addition, failure to observe these safety warnings will result in a waiver of all liabilities and will void all warranties.

WARNING

- If the exterior of the lamp is damaged, replace lamp immediately.
- When re-lamping, make sure lamp has time to cool before touching.
- Make sure power cord is connected properly.
- Disconnect power before re-lamping.
- **DO NOT** hang by power or lamp cord.
- **DO NOT** make contact with the interior of the socket while power is on.
- **DO NOT** operate light systems in wet locations.
- **DO NOT** plug system into supply voltage other than what is designated on ballast.
- **DO NOT** attempt to rewire or reconfigure your system, it will void warranty and could cause serious safety hazards (i.e. power cord, lamp cord, lamp socket or ballast).
- Keep away from children.

**SUN SYSTEM® 1000 DE® BOSS COMMERCIAL
FIXTURE SYSTEM SETUP:**

1. Remove the system from the box along with all additional parts.
2. These systems do not require much setup.
3. Insert a DE lamp into a DE reflector. **(FIG. 1)** Insert each lamp wire of the double-ended lamp into both socket slots. Make sure the wires are straight. Push both ends of lamp firmly down into the metal clips. Slide each socket slider lock over both ends of the lamp to secure the lamp into place.
4. Hang the fixture using V-hangers provided **(FIG. 2)**. Use an eye bolt or some other means of securely hanging from the ceiling. Sun Grip® Push Button Light Hangers (#710122, #710114, #710116 & #710123), **(FIG. 3)**, Sky Hook™ Light Hangers (#710119) or jack chain (#350205) may be used to adjust the hanging height.
5. Plug the unit into the proper NEMA configured receptacle or hardwire unit depending on model voltage.

FIG. 1

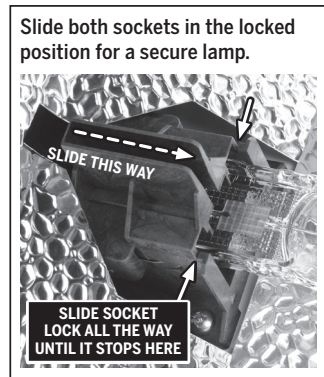
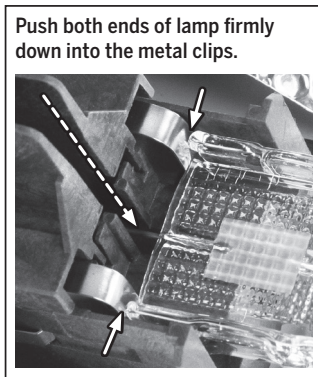


FIG. 2

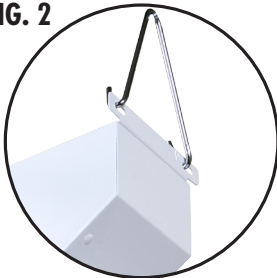


FIG. 3



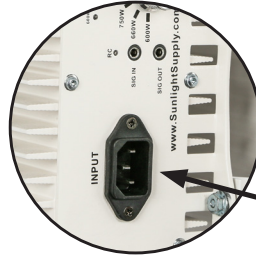
SAFETY FIRST!

- **DO NOT** alter or modify this unit in any way. It may cause bodily injury or death as this is a high power electrical device.
- **DO NOT** submerge in water or splash water on the unit.
- **DO NOT** plug or unplug the lamp cord while the ballast is energized.

These high performance, high frequency electronic ballasts are extremely efficient. They have a high power factor and high luminous efficacy. It's stable performance creates constant power output even when power fluctuates (power surge). Short circuit protection technology prevents damage to the lamp and other ballasts connected to the same circuit.

1. INSTALLATION PROCEDURE

- **DO NOT** alter or modify the electronic ballast in any way. Not only may it damage the unit, it will void the warranty.
- Lamp power rating must match electronic ballast power rating.



**CONNECT
APPROPRIATE
AC POWER
PLUG HERE**

This Ballast offers our exclusive Convertible Smart Volt 120/240V Power Cord.

**Includes Convertible
Smart Volt® Dual Ferrite
Power Cord that easily
converts to either 120
or 208/240 volt power.**



2. SPECIFICATIONS

- 120, 208 or 240 Volt
- Power source frequency: 50/60Hz
- Power Factor ($\cos\phi$): ≥ 0.97
- Ambient Temp: 50°F to 120°F
- Crest Factor: ≤ 1.6
- Acoustic Resonance: none
- Total Harmonic Distortion: (THD): $< 10.0\%$

3. NOTES

- This Sun System 1000 DE® BOSS Commercial Fixture Electronic Ballast is designed to operate 1000W double ended H.I.D. lamps.
- This unit offers short-circuit and power fluctuation protection.
- Features internal built-in circuit breaker.

240V WIRING - VERY IMPORTANT! All digital ballasts may malfunction if the 240V circuit has a neutral. The input for the ballast is 2 HOT WIRES and 1 GROUND WIRE. If you are using a light controller ONLY bring a ground wire and two hot leads from your electrical panels.

HOT RESTRIKE - The 1000 DE® BOSS COM features a hot restrike function to protect the lamp and ballast. This function allows the ballast to reignite the lamp once it has cooled. In the event of a power interruption or failed ignition the ballast will wait one minute and attempt to restart the lamp. If the lamp does not ignite at that time it will make four more attempts in five minute intervals. If the ballast has ran through the complete sequence (1 minute -5 minutes -5 minutes -5 minutes) the ballast will go into a locked mode. The ballast will not begin the ignition sequence again until it has been disconnected from power. This can be achieved by unplugging the ballast and plugging it back in or waiting until the next set timer cycle. Do not unplug the ballast until it has completed the full twenty-six minute sequence.

LAMP REPLACEMENT - Be sure to disconnect the power source before changing lamps. Always use the specified wattage lamp. (ie: A 400W halide lamp should not be used in a 600W ballast).

TIMER BOX - If you are connecting a 240V ballast to a timer box, please make sure that it cuts off both legs when timer is switched off. If you continue to supply 120V to your ballast when the timer is switched off, it may damage your ballast.

LAMP RECOMMENDATIONS - The ballasts are designed to provide superior performance with several lamps manufactured to American specifications. There are several brands of lamps available for the U.S. market that were made according to European specifications. We do not recommend using these types of lamps, since they will provide inconsistent performance with your ballast.

ERROR CODES - If the ballast encounters any abnormal conditions the built in self-diagnostic feature will display easily identifiable error codes. Error codes can be identified by the number of flashes made by the green LED marked "turbo".

1 Flash = Ballast Protection: This code means that the ballast has gone into a locked mode to protect itself. This may be followed by another code to help troubleshoot the cause.

2 Flash = Bad Lamp/Short Circuit: This code means that the ballast has a bad connection somewhere between the ballast and lamp. Reasons can include a bad lamp, loose lamp, loose lamp cord, a short in the cord or reflector, or a short in the ballast receptacle.

3 Flash = Low Voltage: This code means the power coming from the outlet to your ballast is not sufficient to power the unit.

4 Flash = Over Temperature: this code means the ballast has shut itself off due to overheating (>140° F).

5 Flash = Over Voltage: This code means the power from the outlet to your ballast has exceeded the maximum allowed voltage.

6 Flash = Lamp Fault: incorrect/non compatible lamp will not work with ballast.

ETELLIGENT™ CONTROLLER KIT COMPATIBLE - This ballast is controller-compatible with Sun System® 1 Ballast signal ports for wired control of the on/off/ dimming functions. The Sun System® 1 Etelligent™ Controller Kit #902245 (sold separately), allows up to 400 Sun System 1 ballasts to be daisy-chained together.

TROUBLESHOOTING GUIDE

Follow the troubleshooting tips below. If troubleshooting techniques fail, bring ballast back to your place of purchase to request warranty service.

POSSIBLE CAUSES	CORRECTIVE MAINTENANCE
LAMP LOOSE IN SOCKETS	Make sure that the lamp is fully inserted into the sockets and that the sockets are in the closed position.
INCORRECT VOLTAGE	Make sure you are using the correct input voltage with ballast. If using incorrect voltage, disconnect the ballast from the power source immediately.
DEFECTIVE OR IMPROPER WIRING	Examine wiring to ensure it agrees with wiring diagrams on ballast label. Check connections to see that they are secure. If wiring a 240V ballast, DO NOT use a neutral. The correct wiring is two hot wires and a ground.
POOR ELECTRICAL CONNECTIONS	Check wiring and lamp contact with socket. Make sure the lamp cord is firmly seated in output receptacle.
INCORRECT LAMP	Verify that you are using a 1000 W double ended lamp. Lamps manufactured according to European or Asian specifications will not provide consistent performance.
LAMP DAMAGE	Investigate possibility of outer bulb damage. Look for broken tubes or loose metal parts. Replace lamp.

Part 18 compliance	This device complies with Part 18 of the FCC Rules.
Advisory statement	This product may cause interference to radio equipment and should not be installed near maritime safety communications equipment or other critical navigation or communication equipment operating between 0.45-30 MHz.
The interference potential of the device or system	The interference potential of the device or system is the operating frequency; 110 kHz.
Maintenance of the system	Unplug the unit, wait 30 seconds, and plug the unit back in.
Simple measures that can be taken by the user to correct interference	Move the unit away from any radio device.

- This product contains delicate electronic components. This means that if it is placed near an object that transmits radio signals, it could cause interference. This could be, for example, mobile telephones, walkie talkies, CB radios, remote controls and microwaves. If interference occurs, move such objects away from the appliance.

Sun System One DE 600/750/825/1000/Turbo Charge 120/240 Volt:

Compliant with both FCC Article 18 Part A (governs commercial use) and FCC Article 18 Part B (governs residential use) as tested by an independent US testing lab in a true as used configuration. In our case, Northwest EMC or ElectroMagnetic Investigations, Hillsboro OR.

This installation guide does not supersede national, state, or local regulations for electrical installations.

TROUBLESHOOTING... IF YOUR FIXTURE DOES NOT WORK:

1. CHECK YOUR ELECTRICAL SOURCE: Make sure the unit is plugged in properly and that the breaker is not tripped or fuse blown.
2. CHECK THE LAMP: Make sure the lamp is fully seated in the socket.

WARRANTY SERVICE:

Please read warranty information first if after troubleshooting problems the light will still not work, you should return the light to the dealer where you purchased it. They will be able to further evaluate the light and test its various components and quite possibly will be able to identify and/or fix any problems. Often the problem is as simple as a defective lamp. If the dealer is unable to fix the light, they will return it to us for factory repair. Many dealers have loaner fixtures that you may check out until yours is returned (usually not more than 7-10 days). To locate the dealer nearest you, visit our website at www.sunlightsupply.com and complete the "Dealer Search". If there are no dealers in your area, you may contact us directly for technical support. If we cannot help you resolve the problem over the phone, we will issue you a RMA # (return merchandise authorization) authorizing you to return the system to us for factory reconditioning (if the unit is under warranty). You will need to provide an email address or fax number so that the Authorization Form may be sent to you. You will need to include this Authorization Form in the packaging when returning your Sun System® unit. Also please write the # on the outside of the box. Please package the light carefully in its original packaging. If it is damaged in shipment we will not be responsible. Once we receive the light back, we will repair it within 48 hours (business) and return it to you via UPS Ground. If the unit cannot be repaired, a replacement will be sent. If there are no replacements available, a comparable unit will be sent back.

IMPORTANT:

PROOF OF PURCHASE REQUIRED FOR RETURNS

SUN SYSTEM® 1000 DE BOSS COMMERCIAL FIXTURE = 3 Year Warranty
Returning Units: Please contact your retail store for returns. WARRANTY INFORMATION: Sunlight Supply®, Inc. warrants to the original purchaser of this product against defects in material and workmanship under normal use for 3 year on Sun System® Commercial fixture. 1 year warranty on lamp. During the warranty period, Sunlight Supply®, Inc. will, at our option, and without charge, repair or replace this product if the unit or any of its components fail or malfunction. This warranty is expressly in lieu of all other warranties, expressed or implied, including the warranties of merchantability and fitness for use and of all other obligations or liabilities on the part of the seller. This warranty shall not apply to this product or any part thereof which has been damaged by accident, abuse, misuse, modification, negligence, alteration or misapplication. Sunlight Supply®, Inc. makes no warranty whatsoever in respect to accessories or parts not supplied by Sunlight Supply®, Inc. This warranty shall apply only to the United States, including Alaska, Hawaii and territories of the United States. NOTE: Sunlight Supply®, Inc. is a manufacturer of supplementary lighting systems. All sales offerings to the public are done through a nationwide group of dealers. No sales offerings will be made directly to the general public.

