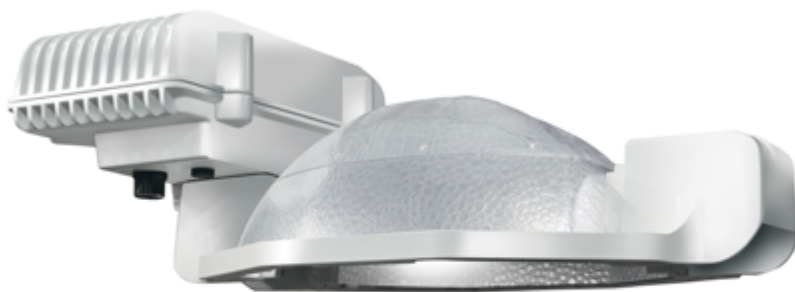




P.L. LIGHT SYSTEMS

THE LIGHTING KNOWLEDGE COMPANY

NXT-LP 1000W



INSTRUCTION MANUAL



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I. Introduction

Thank you for purchasing the P.L. Light Systems NXT-LP. Please read and understand this manually completely before using the product. Only use the product as specified in this manual.

I.1. Used Symbols



Warning! A warning indicates severe damage to the user and/or product may occur when a procedure is not carried out as described.



Caution! A caution sign indicates problems may occur if a procedure is not carried out as described. It may also serve as a reminder to the user.



Note: A note gives additional information, e.g. for a procedure.



This symbol indicates that the reflector and lamp can reach very high temperatures (>85 °Celsius). Allow a cool down period before performing maintenance.



With this symbol P.L. Light Systems declares that this product complies with legal CSA standards.



The symbol on the material, accessories or packaging indicates that this product may not be discarded as household waste. Dispose of the equipment through a recycling centre that handles electronics and electrical appliances within Canada and the United States of America which use separate collection systems for used electronics and electrical appliances. By disposing of the equipment in the proper way, you will be helping to prevent possible risks to the environment and public health, which might otherwise be caused by improper handling of the discarded equipment. Recycling of materials contributes to the conservation of natural resources. Therefore, please do not dispose of your old electronics and electrical appliances via household waste.

2. Product Description

The P.L. Light Systems NXT-LP is an adjustable horticultural light fixture. The P.L. Light Systems NXT-LP can be used to drive a double ended 1000W 400 V electronic (1000W version) high pressure sodium lamp.

In this manual, the P.L. Light NXT-LP will be referred to as: “the fixture”.



3. Product Information and Specifications

3.1. Dimensions

	1000W
length	21.25 in (53.98 cm)
width	11.00 in (27.94 cm)
height	7.50 in (19.05 cm)
weight	10.00 lb (4.54 kg)

3.2. Technical Specifications*

	1000W	
Rated Main Voltage	120V	240V
Input Current	9.08A	4.42A
Power Factor	>0.98	>0.98
Input Frequency	50/60Hz	50/60Hz
Actual Input Power	1090W	1060W
Lamp Type* 1000W	Doubled Ended HPS 1000W 400V electronic ONLY	

*accurate to +/-10% *The use of any lamp, other than specified, will render luminaire warranty null and void.

3.3. Environment

The product is meant for use in climate controlled rooms. The product may be used in damp environments. The product may not be used in wet environments or outdoors. The P.L. Light Systems HPS double-ended lamps function optimally when the ambient temperature is between 20 ~ 30 °Celsius.

4. Safety Recommendations and Warnings



Warning! Carefully read the warnings below before using or working with the product!

- Always adhere to the local and national building and electrical codes when installing or using the fixture.
- 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.
- Do not use the fixture when either its lamp or its power cord are damaged. Replace the power cord only with original certified cords. Replace the lamp only with lamps specified by P.L. Light Systems.
- The use of other lamps may damage the product and lamp and will void the warranty.
- Modifications to the cords can lead to unwanted electromagnetic effects, which makes the product not comply with legal requirements.
- Do not expose the fixture to:
 - condensing humidity, heavy mist, fog or direct spray;
 - (ambient) temperatures outside the specified range;
 - dust and contamination;
 - direct sunlight during use or HID light that could heat up the ballast.
- Always disconnect the fixture from main power source before performing any maintenance.
- Always allow for a cool down period of at least 30 minutes before touching the lamp or reflector. Touching the lamp or the reflector when the lamp is lit or immediately afterwards will result in severe burns!
- Never touch the lamp with bare hands as this will cause damage to the lamp. We recommend always wearing cotton gloves when handling the lamp(s).
- Do not use the fixture near flammable, explosive or reactive substances. The lamp and the reflector of the fixture reach temperatures of >85 °Celsius.
- Do not use sulfur vaporizers or water misters. Sulfur and calcium deposits on your reflector will decrease its efficiency.
- The installation and use of the fixture is the responsibility of the end user. Incorrect use or installation can lead to failure and damage to the fixture. Damage to the fixture and electronic circuitry as a result of incorrect installation and use revokes the warranty.



P.L. LIGHT SYSTEMS

5. Contents (fig 1)

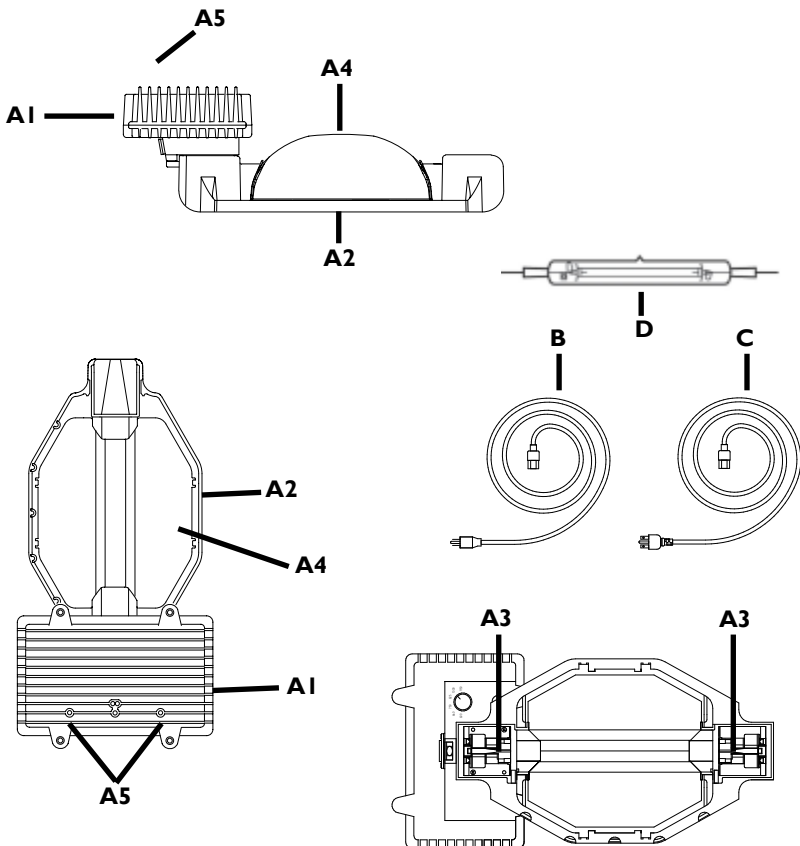
A. NXT-LP fixture

1. Cast aluminum housing with electronic ballast
2. Reflector bracket
3. Lamp holders
4. Beta reflector
5. Mounting points (2) Eye Bolts

B. 6ft 120V Power cord with 15A straight blade plug

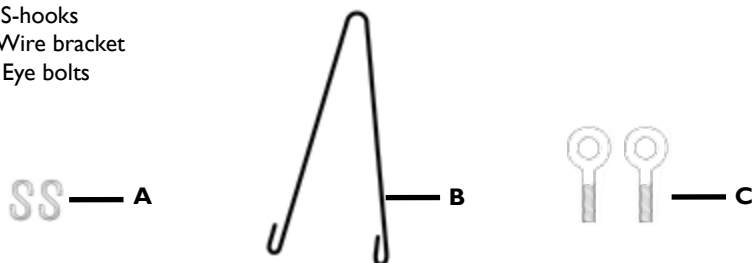
C. 6ft 240V Power cord with 15A straight blade plug

D. Electronic DE lamp



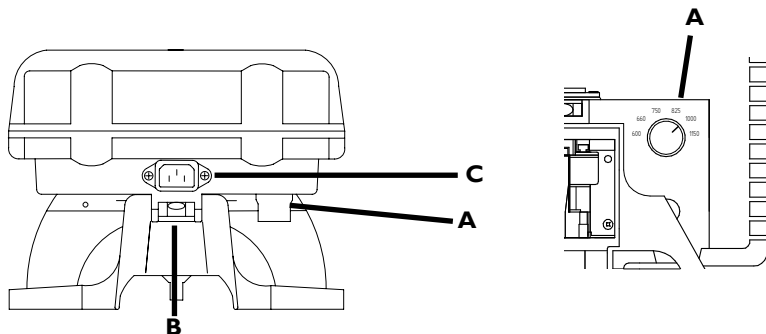
6. Mounting Kit (fig2)

- A. (2) S-hooks
- B. (1) Wire bracket
- C. (2) Eye bolts



7. Controls, Connections and Indications (fig3)

- A. Dimming control knob (adjustable see 9.1)
- B. Integrated level
- C. 120V/240V Cord receptacle



8. Installing the Fixture

-  **Warning!** Avoid coiled cords. Coiled cords may lead to electromagnetic interference.
-  **Warning!** Always install the lamp before connecting the fixture to the main power source
-  **Warning!** Ensure the local cabling can support the voltage and current requirements of the fixture.
-  **Warning!** Always allow ample space above the installed fixture to ensure good airflow. This will prevent an excessive build-up of heat between the fixture and the ceiling which could result in damage to the electronics components and/or lamp.

8.1. Power and Lamp

- Switch off mains power source
- Install the lamp in the fixture (see paragraph 10.1).

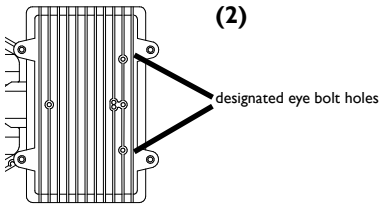


8.2. Install Eye Bolts

- Thread eye bolts in designated areas (2) and tighten.



Note: Dual eyebolts are recommended for leveling purposes.



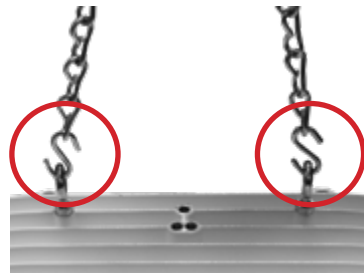
8.3. Mount Chain & Front Bracket

- Cut chain to appropriate length for desired mounting height
- Hang one chain over truss/track and insert mounting bracket through final links on both ends of chain (3)
- Rotate bracket so that hooks are facing downward (4)



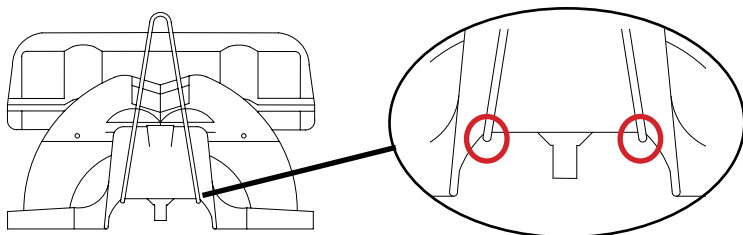
8.4. Install Chain in Eyebolt(s)

- Cut second chain to appropriate length for desired mounting height: hang chain over truss/track
- Insert S-hook(s) through last link on either end of chain (5)
- Raise fixture to ceiling and insert free ends of S-hook(s) in eyebolt(s) on fixture housing. (6)



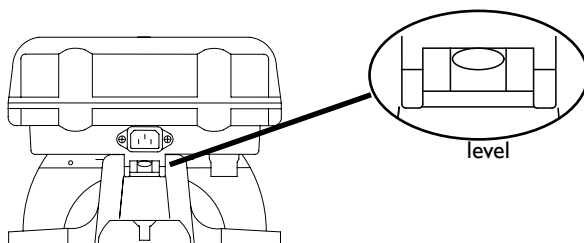
8.5. Attach Mounting Bracket

- Lower front of reflector collar onto mounting bracket hooks
- Adjust so that bracket is securely inserted beneath collar



8.6. Level Fixture

- Use integrated level on the back of the housing to adjust the light fixture. Fixture is level when spirit level bubble is centered.



8.7. Connecting the Fixture to the Power Source



Warning! Ensure the cord is not coiled and does not touch any hot surfaces.

- Plug the power cord into the outlet.

9. Product Use



Warning! Never use the fixture without a lamp or reflector!



Caution! Before you dim or boost your HPS lamp, make sure that you run it at nominal value (100%) for at least 100 hours to stabilize the lamp. Failing to do so may lead to sub-optimal light levels and premature end of life failure of your lamp.



9.1. Adjusting the Output of the Lamp Manually



Note: Adjustment occurs gradually (60 seconds per step) to increase the lifespan of the lamp.

- Turn the output control knob to adjust the output of the lamp:
 - 1000W DE: 600/660/750/825/1000/1150 Watt

10. Inspection, Maintenance and Repair



Warning! Disconnect the product from main power source before performing any maintenance or repairs.



Warning! Do not open or disassemble the fixture, it contains no serviceable parts inside. Opening the fixture can be dangerous and will void the warranty.



Warning! Always allow for a cool down period of at least 20 minutes before touching the lamp or reflector.



Caution! Do not clean the fixture with detergents, abrasives or other aggressive substances.



Caution! Wait 20 minutes before activating the fixture after maintenance work has been conducted.

- Regularly check the fixture for dust or dirt build up. Clean if necessary. Contamination may cause overheating and decreased performance.
 - Clean the reflector as directed in 10.3.
 - Clean the outside of the fixture using a dry or damp cloth as necessary.
- Check the lamp monthly for discolorations or black markings. Always replace a damaged lamp.



Note: Before initial use, the lamp could have black markings. This will disappear when the lamp runs on full power. If not, replace the lamp.

- Regularly check the power cord of the product to ensure it is undamaged.

10.1. Placement and Replacement of the Lamp



Caution! Always wear cotton gloves when touching a lamp to avoid creating a dark spot on the bulb from the oils on your skin.



Caution! Only use lamps specified by P.L. Light Systems (see paragraph 3.2).

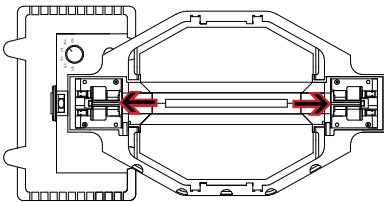


Note: The lamp must be replaced approximately every 10,000 burning hours.

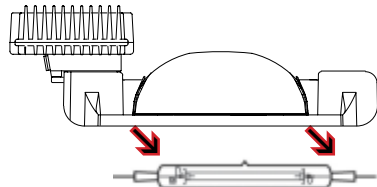
1000W DE

- Switch off main power source.
- Hold the lamp with a fabric glove to prevent it from falling. Use a protective glove if the lamp is damaged.
- Open the lamp holders by sliding the plastic locks outwards (7).
- Carefully take the old lamp out of the fixture (8).
- Install the new lamp with the getter (A) near the ballast (9)
- Use a fabric glove to carefully press the lamp in the fitting until the metal springs hold the lamp.
- Using index finger, apply pressure on the bottom of the rear, center portion of lamp holder (10)—moving the sliding mechanism towards the lamp until front edge aligns with lamp lock indicators (B) on reflector bracket. Repeat on other side. Ensure sliding mechanisms have fully closed against the stops, as loose connections may cause arcing—potentially creating a fire risk and/or voiding warranties.
- Switch on main power source.

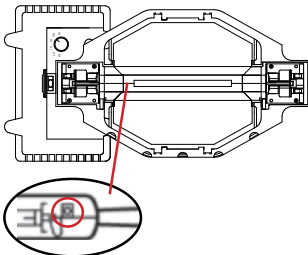
fig(7)



fig(8)

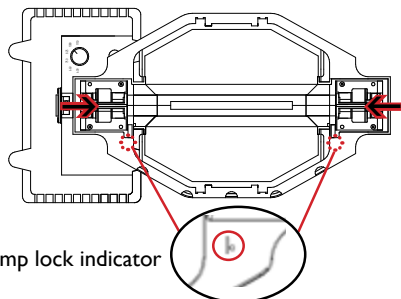


fig(9)



(A) getter

fig(10)



(B) lamp lock indicator



10.2. Placement and Replacement of the Reflector



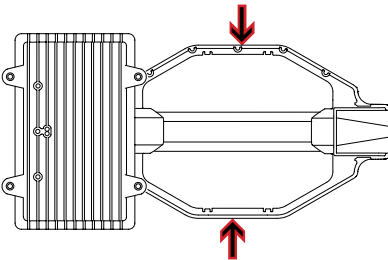
Note: P.L. Light Systems recommends cleaning the reflector once a year (see 10.3) to maintain optimum performance. Depending on the environment and contamination levels the reflector will degrade over time and will eventually need to be replaced.

- Switch off main power source.
- The lamp doesn't need to be removed to remove/replace the reflector.
- Support the reflector with hands on both sides (11).
- Lightly compress the sides of the reflector inwards, past the bracket tabs. (12).
- Lift gently (13).
- Remove the reflector.
- Position the new/clean reflector above the bracket.
- Lightly compress the sides of the reflector inwards, past the bracket tabs.
- Release the reflector
- Using both hands, adjust the reflector from the inside, by gently pressing outwards until the outer rim fits securely beneath the collar tabs on all sides. (14)
- Switch on main power source.

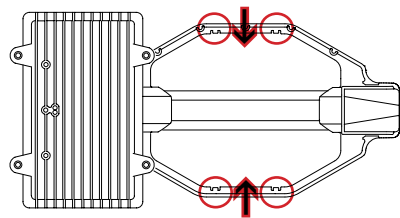


Note: Wear cotton gloves or wash hands thoroughly with soap & water to remove any grime/oils before handling reflector.

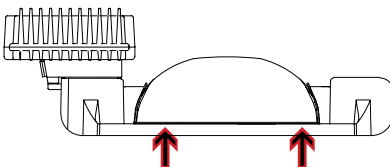
fig(11)



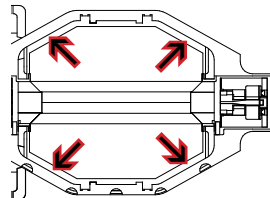
fig(12)



fig(13)



fig(14)



10.3. Maintenance Cleaning the Reflectors

Regular cleaning of reflectors is essential for optimal lighting performance. Your reflectors need to be cleaned at a minimum every two years, but every year is highly recommended.

- Switch off main power source.
- Remove the reflector from fixture (see paragraph 10.2.).
- A reflector can be cleaned with a 1:100 vinegar to water solution. Dip the reflector in this solution for a few seconds.
- If necessary, rub lightly with a fine fingernail brush to loosen the dirt. Once the dirt is loosened, rinse the reflector in distilled water. Rinse the reflector once more in distilled water.
- Hang to air dry. Once dry, if there are still heavy deposits or anything that cannot be removed, it is time for the reflector to be replaced.
- Re-install reflector (see paragraph 10.2.)
- Switch on main power source.



Note: P.L. Light Systems recommends for your safety, when cleaning reflectors always maintain the correct ratio and never add other chemicals to the solution. Wearing hand and eye protection is advised.



11. Storage and Disposal

- Store the fixture in a dry and clean environment, with an ambient temperature of -20 ~ 85 °Celsius.
- The product must not be discarded as unsorted municipal waste, but must be collected separately for the purpose of treatment, recovery and environmentally sound disposal.



Caution! The lamps are chemical hazardous waste. Manage in accordance with local disposal laws.



Caution! The lamp contains mercury.

12. Warranty

P.L. Light Systems warrants the mechanical and electronic components of their product to be free of defects in material and workmanship if used under normal operating conditions for a period of two (2) years from the original date of purchase. If the product shows any defects within this period and that defect is not due to user error or improper use P.L. Light Systems shall, at its discretion, either replace or repair the product using suitable new or reconditioned products or parts. For the reflector and supplied HPS lamp the warranty period is one (1) year from the original date of purchase.

Note: The use of any lamp other than specified by P.L. Light Systems (including Metal Halide), will render luminaire warranty null and void. In case P.L. Light Systems decides to replace the entire product and/or warranted components, this limited warranty shall apply to the replacement product/components for the remaining initial warranty period, i.e. two (2) years from the date of purchase of the original product. For service, return the fixture to the place of purchase with the original sales receipt. All information represented in this guide has been checked to be as accurate as possible. However errors may be present. P.L. Light Systems reserves the right to refuse service to any product at their discretion.



12.1. Limitation of Liability

In no event shall P.L. Light Systems be liable for any incidental, special or consequential damages, including but not limited to loss of business, profits, data or use, whether in an action in contract or based on a warranty, arising out of or in connection with the use or performance of the product, even if P.L. Light Systems has been advised of the possibility of such damages.



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