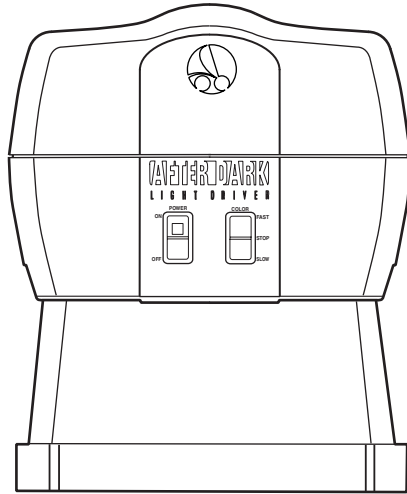


# OWNER'S MANUAL



 **PolarisAfterDark**

---

IMPORTANT INFORMATION

# Important Information

Follow these simple guidelines, to protect against injury and prolong the life of your Polaris AfterDark® light driver.

- The light driver operates on 120VAC, 60Hz. Do not attempt to alter the unit to operate on any other voltage.
- Always turn off the power supply to the light driver before removing the cover.
- Keep the ventilation slots at the bottom of the unit clear of leaves and debris.
- Do not sit or stand on the light driver, or place anything on top of it.
- Do not submerge the light driver in water or operate it while it is buried in snow. The unit must be ventilated at all times to avoid damage and voiding of the warranty.
- Do not allow children to play with the light driver.
- The light driver is equipped with a metal-halide lamp which builds brightness gradually. It may take as long as 2 minutes for the light intensity to peak. If the light driver is shut off after warming up, it may take up to two minutes to regain full intensity.
- Use only Polaris lamp #AD300 to replace the bulb in this light driver. Failure to do so could result in bodily injury or damage to the light driver.
- Install the light driver at least five feet (1.5 meters) from the pool, spa or hot tub.
- The Polaris After Dark light driver is designed to work with genuine Polaris fiber optic cable only. Polaris is not responsible for damage to non-Polaris fiber optic cable.

## For customer service or support:

- Please mail Warranty Card immediately.
- For on-line support: [www.polarispool.com](http://www.polarispool.com)
- To contact Polaris:

### **US and Canada**

Customer Service  
2620 Commerce Way  
Vista, CA 92081-8438  
1-800-822-7933

### **Australia**

Unit 4, 19-21 Gibbes Street,  
Chatswood, NSW 2067  
1-300-POLARIS  
ACN 080 168 092

### **Europe**

C/Osana s/n.  
(Pol.End.El Ramassar),  
98520 Les Franqueses del Vallés  
Barcelona, Spain  
+34 93 840 25 85

# Introduction

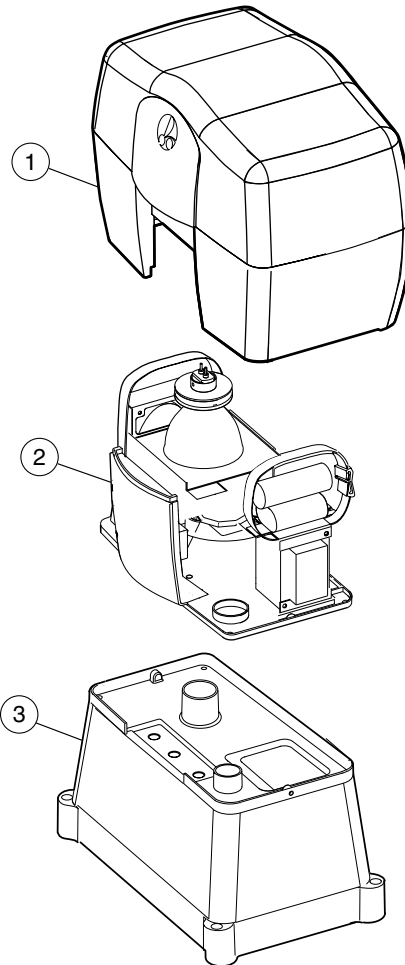
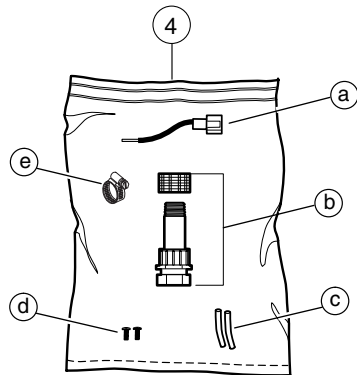
Congratulations on the purchase of your new fiber optic lighting system and thank you for choosing Polaris. The Polaris AfterDark® light driver is designed to provide safe, beautifully colored lighting and years of trouble-free service.

The brightness of a fiber optic lighting system is determined by many factors including the cable length, the size of the pool, the color of the pool's interior, and the amount of ambient light in the pool area. If you have purchased the AD150 equipped with a Color Wheel, you will notice variations in color intensity in different colors. Each color emits a different level of brightness, white is the brightest and magenta is the least bright.

Always insist on genuine Polaris replacement parts. Non-Polaris parts are not made to our specifications and can adversely affect the operation of your light driver.

## Polaris After Dark Complete

1. Cover
2. Chassis Assembly
3. Installation Base
4. Parts Bag
  - a. Color wheel control plug
  - b. Manifold
  - c. 4" filler cables
  - d. Screws
  - e. Clamp

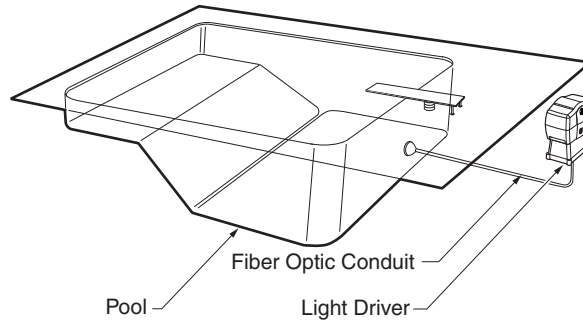


# Installation Instructions

# 1

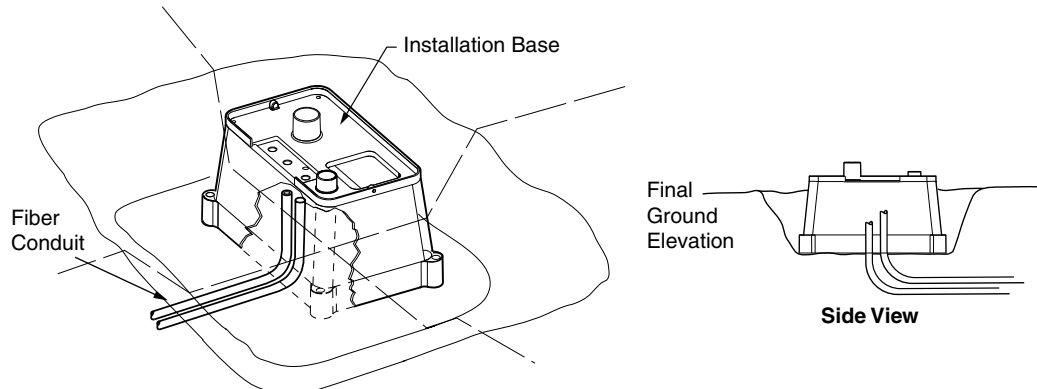
## Prepare the Conduit

Run separate conduits for each lens location. Use only sweep ells or heat-bent PVC, not standard 90° plumbing fittings. Center the fiber optic conduits where the installation base will be placed.

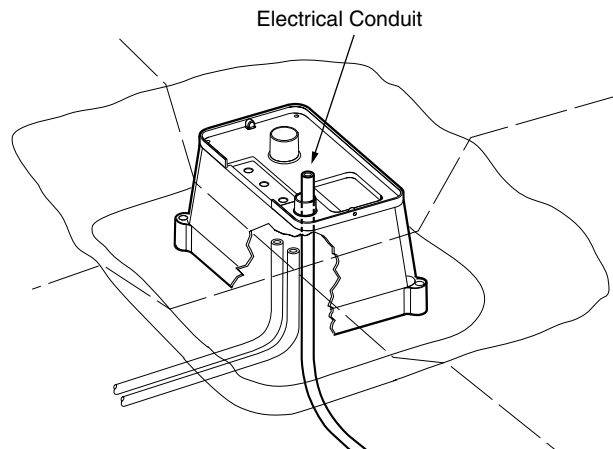


Remove the cover and separate the chassis assembly from the installation base. Using the handles, lift the chassis off the base and place it in a safe location until ready to complete electrical connections.

Cut the conduit so it protrudes 1/3 of the way into the installation base.



Guide the electrical conduit through the small hole in the installation base until it extends 1" to 4" above the base.



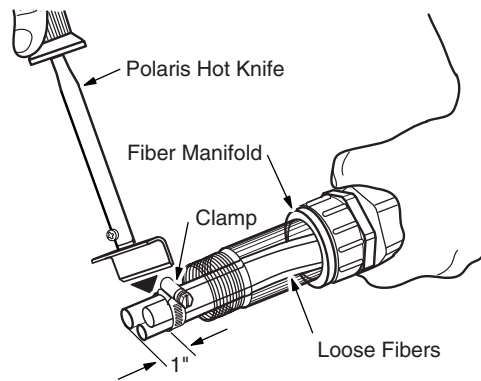
# 2

## Install the Base

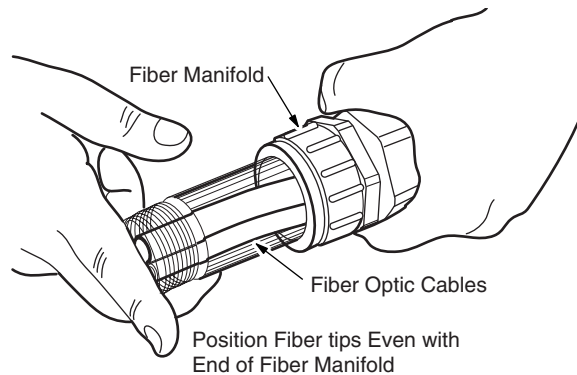
If installing underwater lights, install the Universal Fiber Lens (part #AD10) first and then install the light driver. If installing a light kit, install the fiber first and then install the light driver.

Remove the installation base to access conduit ends.

1. Feed the fiber optic cable through the conduits. Measure enough cable for a service loop of at least 18" but no more than 36" at the light driver.
2. Strip the fiber casing back 8-10" to expose the bare fibers. Hold the tips of the fiber cables even and insert them through the fiber manifold body starting at the compression fitting. Push the fiber through until the bare fibers extend 3-4" past the manifold opening.
3. Secure the loose fibers with the clamp provided, making sure that the individual fibers extend at least 1" beyond the clamp. Use the Polaris Hot Knife to trim the fibers until the ends are clean and even with the clamp.

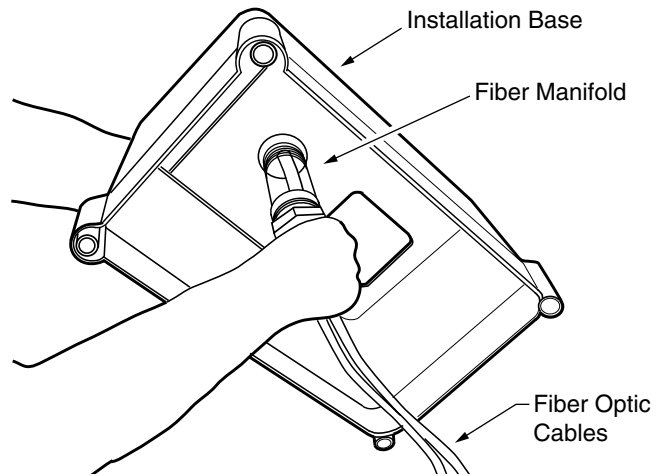


4. Remove the clamp and slide the fibers back so that they are flush with the manifold opening.

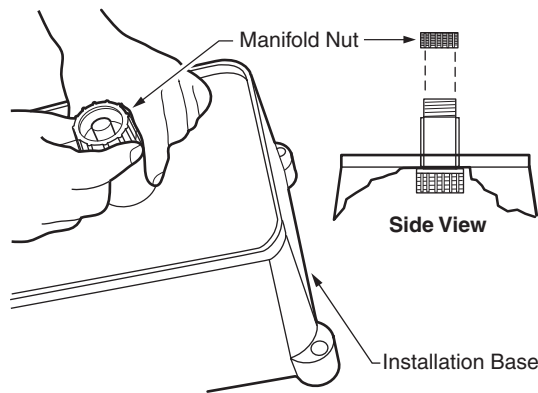


5. Hand tighten the compression fitting. If the fitting does not hold the fiber casings securely, loosen the fitting, insert the filler cables provided and re-tighten the fitting.

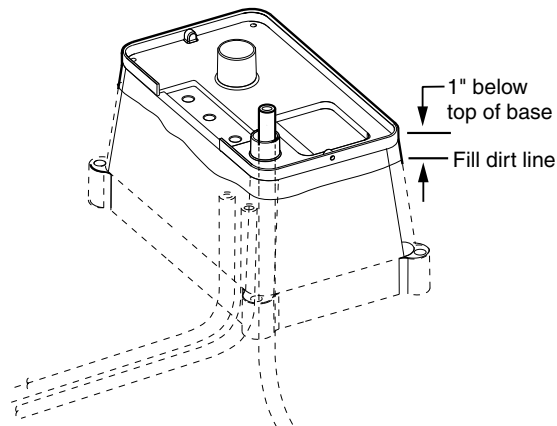
6. Insert the fiber manifold into the installation base from the bottom and secure it at the top with the manifold nut.



7. Place the installation base over the ends of the fiber optic conduits while guiding the electrical conduit through the smaller hole.



8. Backfill dirt around the installation base to secure it. Ground level should be at least 1" below the top of the base.



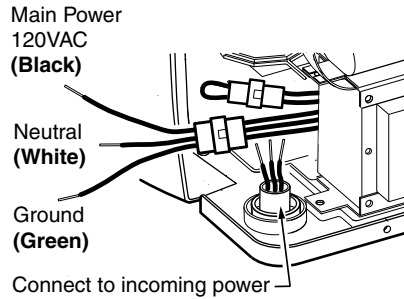
# 3

## Install Chassis Assembly

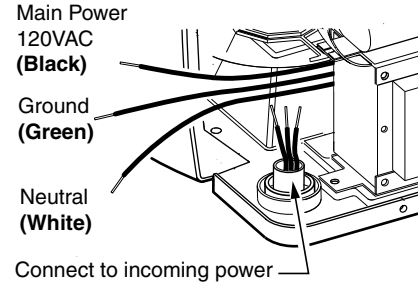
Using the handles, lift the chassis assembly onto the installation base and secure.

To connect the electrical supply, check the model number of your light driver and refer to the wiring connection requirements below for the proper configuration.

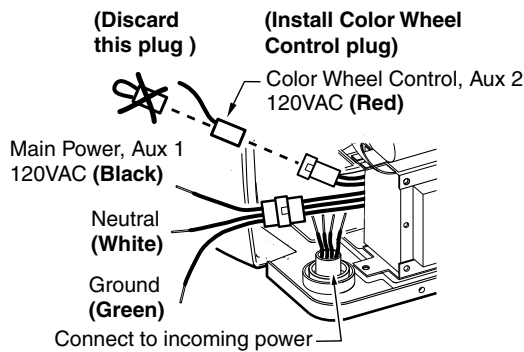
**Model AD150**, manual control light driver.



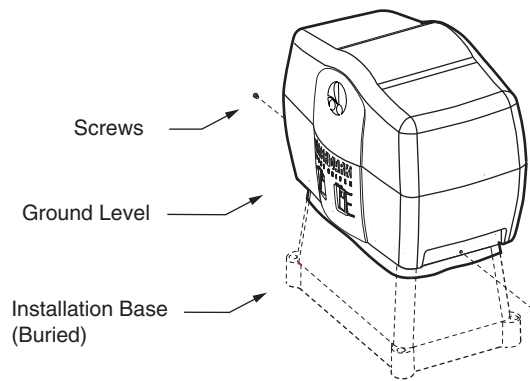
**Model AD151**, white light only light driver.



**Model AD150**, remotely controlled by Polaris Sol 1000 or another external control system.



Position and secure the cover onto the installation base/chassis assembly.



# Operation

## Power Switches

The switch plate controls power and light. If you have model AD151 which emits white light only, there will be no color wheel switch.

When turned on, the cooling fan will engage and the indicator light on the power switch will glow. Due to the nature of the metal-halide lamp system, the fiber optic light will get brighter gradually; it may take up to two minutes to reach full intensity.

If using a Polaris Sol controller or any other external remote control system, leave the power switch on at all times. The power to the light driver will be activated by the external remote control.

## Color Wheel Settings

### (Model AD150)

The color wheel switch has three positions: STOP, FAST and SLOW.

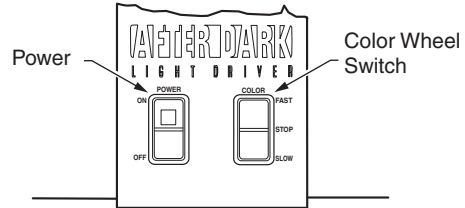
STOP: the color wheel stays on one color

FAST: the color wheel rotates quickly (1 RPM) and the colors change every 6.5 seconds.

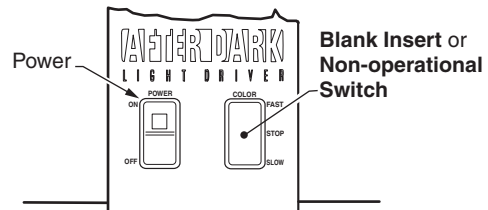
SLOW: the color wheel rotates slowly (1/2 RPM) and the colors change approximately every 13 seconds.

Activation of the color wheel can be controlled by a Polaris Sol controller or another remote control system; however, the rotation speed of the color wheel can only be changed manually at the light driver control panel.

AD150 Control Panel. Light Driver **With Color Wheel**

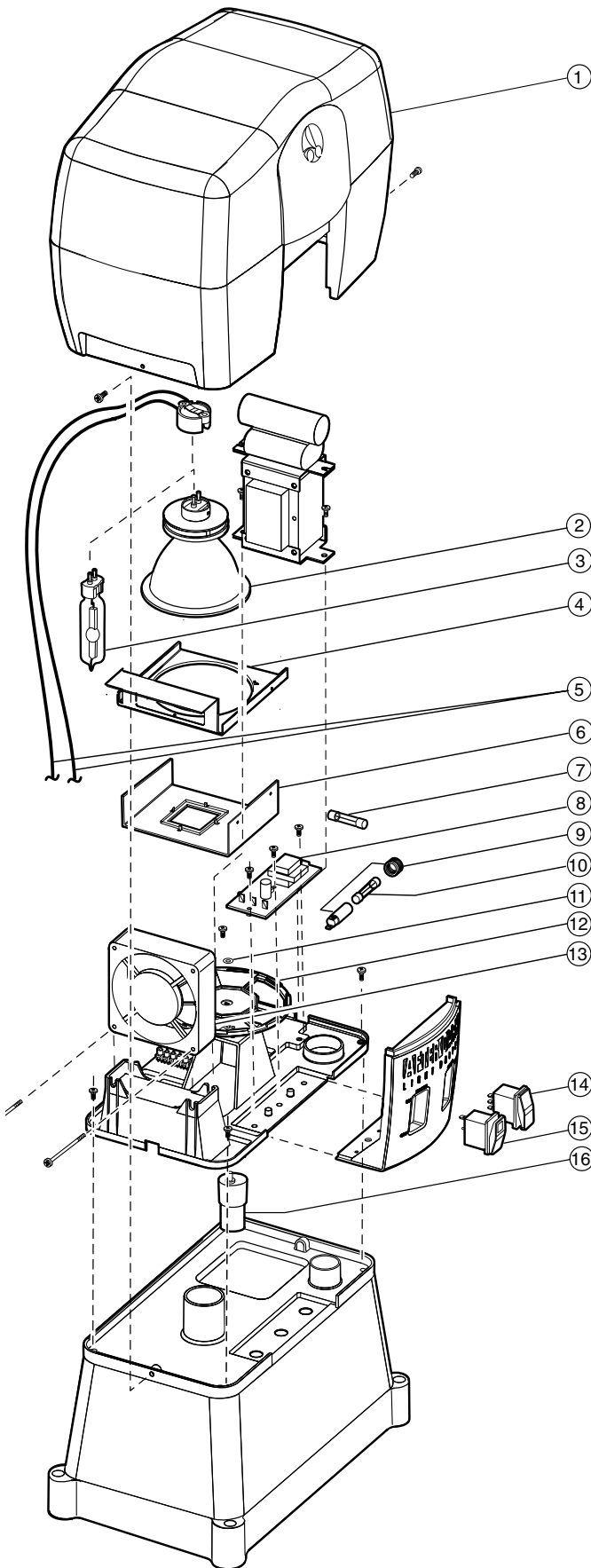


AD151 Control Panel. Light Driver **With No Color Wheel**



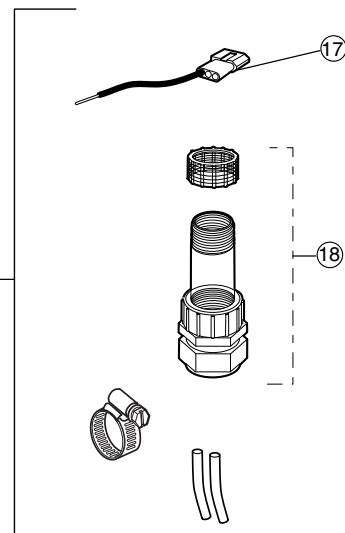
# PolarisAfterDark

## Exploded Parts Diagram



No.	Part	Description	Qty
1	AD210	Cover	1
2	AD300	Lamp/Reflector Assembly	1
3	AD305	Lamp Only, 150W H.I.D	1
4	AD310	Lamp Bracket	1
5	AD325	Lamp Wire/Socket Assembly	1
6	AD320	Heat Filter Assembly	1
7	AD435	Fuse, Color Wheel	1
8	AD430	Color Wheel Control Board	1
9	AD640	Fuse Holder, Main Power	1
10	AD650	Fuse, Main Power	1
11	AD410	Color Wheel Retainer	1
12	AD400	Color Wheel Assembly	1
13	AD630	Fan	1
14	AD620	Switch, Color wheel Power 3-way	1
15	AD610	Switch, Main Power 2-way	1
16	AD420	Color Wheel Motor	1
17	AD500	Color Wheel Power Connector	1
18	AD100	Manifold Assembly	1
	AD10	UFL Waterproof Lens Housing, Universal, 1-1/2" MIP	
	AD15	Wireless Remote	

Parts Bag  
Components



# Troubleshooting

If the Polaris After Dark displays any of the following actions, adjustments may be necessary to restore performance. Refer to the exploded parts diagram for part numbers indicated in parenthesis.

**Action: The light driver does not come on.**

- Solution:
1. Verify that unit is turned on.
  2. If using an external remote controller to activate the 120VAC supply, make sure that the relay controlling the light driver is on and supplying power.
  3. Locate the Ground Fault Circuit Interrupter (G.F.C.I.) protecting the circuit and verify proper operation by following the Test and Reset instructions on the G.F.C.I.
  4. Verify that the in-line fuse (#8), located on the chassis, is intact.

**Action: The color wheel does not rotate.**

- Solution:
1. Verify that the color switch is positioned for slow or fast operation.
  2. If using a Polaris Sol controller or other external remote controller, make sure the relay controlling it is on and supplying power.
  3. Check the spade connectors on the color wheel circuit board (#7) and verify that they are connected properly.

**Action: The light output has dimmed over time.**

- Solution:
1. Turn off the power to the light driver and check for dirt build up on the manifold tip, color wheel, and heat filter. Clean as necessary.

2. Check the universal fiber lens to make sure it is not filled with water. The area around the fiber tip inside the lens must be dry.

**Action: The light driver is turned on but it continues to cycle on and off.**

- Solution:
1. With the unit operating, listen for the cooling fan (#13). If it is not heard, it may be blocked. Turn off the main power to the light driver, remove the cover, clear the fan of any debris and check its wiring.

## **Polaris After Dark Light Driver Limited Warranty**

This limited warranty is extended to the original consumer purchaser of this Polaris After Dark light driver manufactured by Polaris Pool Systems, Inc., 2620 Commerce Way, Vista, California 92083-8438, USA.

Polaris warrants the light driver it manufactures, including all parts and components thereof, to be free of defects in material and workmanship. We do not cover improper installation of the Polaris After Dark light driver or fiber optic cable but our instruction manual is complete enough to solve any problems — particularly if it is read before, rather than after, the installation. If you have any questions regarding your Polaris After Dark product, please feel free to call or write us. Be sure to include the serial number of your unit.

The warranty commences on the date of installation of the Polaris After Dark light driver. The Polaris After Dark light driver parts are warranted for a period of one year. Polaris will not be responsible for any damage to non-Polaris fiber optic cable. This Polaris After Dark light driver is designed to work only with genuine Polaris fiber optic cable.

This limited warranty does not apply if the failure is caused by or contributed to any of the following: improper handling, improper storage, winter freezing, abuse, improper installation, unsuitable application of the unit, lack of reasonable and necessary maintenance, or repairs made or attempted by other than Polaris or one of its Authorized Service Centers. Polaris will repair or replace, at its option, a unit or part proved to be defective within the warranty period and under the conditions of the warranty.

Polaris is not responsible for the cost of removal of the unit or part, damages due to removal, or any other expenses incurred in shipping the unit or part to or from the factory or its Authorized Service Centers, or the installation of the repaired or replacement unit. The consumer must bear these expenses.

This warranty does not cover repair or replacement of a unit or part except at our factory or a Polaris Authorized Service Center.

THIS LIMITED WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, AND ALL SUCH OTHER WARRANTIES ARE DISCLAIMED EXCEPT TO THE EXTENT ANY IMPLIED WARRANTY MAY BE IMPOSED BY STATE CONSUMER LAW. ANY SUCH IMPLIED WARRANTY IMPOSED BY STATE CONSUMER LAW IS LIMITED IN DURATION TO ONE (1) YEAR FROM DATE OF PURCHASE. IN NO EVENT SHALL POLARIS BE LIABLE FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES OF ANY NATURE OR KIND OR FOR DAMAGES TO PERSONS OR PROPERTY.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations may not apply to you.

This limited warranty is valid only in the United States of America, Canada and Australia, and it does not apply to Polaris After Dark light drivers sold or installed in any other country.

## **Model Specifications**

### **Model: AD150 (Colored Light)**

Lamp Type: Metal-Halide Lamp, CDM

Replacement Lamp P/N: AD300

Colors: 9

C/W Motor: 12 VDC, 2 speeds

Voltage: 120 VAC, 60 HZ

Power Consumption: 200 Watts Max

Start Current Load: 4.4 Amps

Run Current Load: 1.8 Amps

Enclosure Material: Luran® S ASA

Ventilation: 110 cu. ft./min.

Weight: 21 lbs.

### **Model: AD151 (White Light)**

Lamp Type: Metal-Halide Lamp, CDM

Replacement Lamp P/N: AD300

No Colors

No Color Wheel Motor

Voltage: 120 VAC, 60HZ

Power Consumption: 200 Watts Max

Start Current Load: 4.4 Amps

Run Current Load: 1.8 Amps

Enclosure Material: Luran® S ASA

Ventilation: 110 cu. ft./min.

Weight: 20 lbs.



**USA: 2620 Commerce Way, Vista, CA 92081-8438 • 760-599-9600 • 1-800-VAC-SWEEP** (USA and Canada only)

Australia: Unit 4, 19-21 Gibbes Street, Chatswood, NSW 2067 • 02-9882-1111 • ACN 080 168 092

Europe: C/Osona s/n. (Pol. Ind. El Ramassar), 08520 Les Franqueses del Vallés, Barcelona, Spain • +34 93 840 25 85

[www.polarispool.com](http://www.polarispool.com)