With the purchase of this NOCTURN UltraViolet Light Source, you are assured of the most flexible and best performing ultraviolet fixture in its class.

The ultraviolet light source is a high-intensity lighting system for indoor and outdoor use. The fixture is used to evenly illuminate fluorescent materials in many environments, especially when an extremely wide field or projection across great distances is necessary. The fixture can be manually operated or addressed for use with standard DMX-512 protocol lighting control. The lighting fixture has been designed for quiet and efficient operation, maximum lamp life and easy field serviceability.

**IMPORTANT**

Before attempting to operate this light source, read the entire operation manual. Improper set-up, use or servicing may cause damage to the fixture and/or lamp that can void any applicable warranty!
TABLE OF CONTENTS

I. Introduction........................................................................................................ 3
   Caution/Warning Statements................................................................. 3
   System Description............................................................................. 4
   Specifications....................................................................................... 5
   Allowable Ambient Conditions.......................................................... 5

II. Receiving, Inspection and Storage.............................................................. 6
   Receiving and Handling....................................................................... 6
   System Inspection................................................................................ 6
   Storage................................................................................................. 7

III. System Installation.................................................................................. 8
   Installation and Adjustments............................................................... 8
   Accessories......................................................................................... 8

IV. System Interface and Operation............................................................. 9
   Control Interface/Display.................................................................... 9
   Manual Operation............................................................................... 10
   DMX Operation................................................................................... 11
   Hot Restrike Operation................................................................. 12
   Lamp Hour Meter Mode................................................................. 13

V. Servicing.................................................................................................. 14
   Lamp replacement............................................................................. 14
   Main Power Switch/Circuit Breaker.................................................. 15
   Maintenance/Cleaning....................................................................... 16
   Trouble Shooting............................................................................... 17
   Warranty............................................................................................ 20

VI. Replacement Part Numbers.................................................................. 20
   Replacement Component Assembly Drawings.................................... 21

LIST OF ILLUSTRATIONS

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>600 Watt Fixture</td>
<td>21</td>
</tr>
<tr>
<td>2</td>
<td>600 Watt Internal Components</td>
<td>22</td>
</tr>
<tr>
<td>3</td>
<td>Wiring Diagram</td>
<td>26</td>
</tr>
<tr>
<td>4</td>
<td>Spectral Transmission Chart</td>
<td>27</td>
</tr>
<tr>
<td>5</td>
<td>Comparative Fixture Illumination Performance</td>
<td>28</td>
</tr>
</tbody>
</table>
I. INTRODUCTION

The NOCTURN UltraViolet Light Source is intended to provide a source of illumination for fluorescent materials. The fixture can be used in a variety of applications where high intensity fluorescent illumination is desirable, such as entertainment, special effects, industrial, and scientific uses.

Caution/ Warning Statements

The following cautions and warnings apply to the use, maintenance and care of the UV light source.

- This operation manual should be read and fully understood to enhance operator safety.
- Disconnect the power cord prior to attempting any servicing to the fixture. Always verify the cord is unplugged prior to opening the front cover for lamp replacement or servicing the fixture.
- **DO NOT OPERATE THE FIXTURE WITHOUT AN INTACT FILTER WINDOW SECURELY IN PLACE. REPLACE THE WINDOW IF ANY CRACKS ARE FOUND THAT MAY ALLOW UNFILTERED LIGHT TO ESCAPE.**
- **THE LAMP PRODUCES INTENSE LEVELS OF ULTRAVIOLET RADIATION WHICH WILL CAUSE BURNS OR DAMAGE TO BARE SKIN AND UNPROTECTED EYES. DO NOT ALLOW THE FIXTURE TO OPERATE IN ANY MANNER THAT ALLOWS UNFILTERED LIGHT TO BE RELEASED.**
- Adequate cooling is necessary for operation of the fixture. Provide a minimum of 12 inches (30 cm) free air space on the sides and rear of the fixture. Do not place any combustible objects closer than 36” (90 cm) in front of the fixture while it is operating. The fixture must not be operated in confined areas subject to ambient temperatures higher than specified (see Section I, System Specifications).
- Allow a minimum of 10 minutes for lamp cooling before attempting to replace the lamp. Portions of the lamp attain extremely high temperatures during operation and can cause serious burns if touched while hot.
- Do not subject the fixture to extreme mechanical shock or rough handling that may damage the lamp or internal fixture components.
- For maximum lamp life, allow the lamp to remain ON for a minimum of 5 minutes any time the lamp is ignited.
- Clean the lamp with isopropyl alcohol and a lint-free cloth after it has been installed into the fixture to help eliminate premature failure from contaminants. This procedure will help increase life and performance.
- When removing a fixture for servicing or inspection, exercise extreme caution when loosening the clamp from the pipe or truss. The fixture may be installed in such a manner that a moment arm is created during the installation. This may cause the fixture to swing down violently when the clamp is loosened.
System Description

The fixture uses a special double-ended linear high intensity discharge lamp that has been custom manufactured to NOCTURN specifications. The lamps will produce maximum levels of ultraviolet energy peaked at 365 nanometers (UV-A).

In combination with the Atek™ reflector, the fixture is able to provide greater output in the UV-A region than other similar fixtures operating at much higher wattages.

A specially modified electronic ballast assembly, in conjunction with a high voltage igniter, have been optimized for use with the NOCTURN 600 Watt lamp. The electronic ballast offers several advantages, including extremely efficient and flicker-free operation, reduced weight and uniform brightness. A high voltage pulse from the igniter provides hot re-strike capabilites for immediate output and a reduced time to maximum output*.

By utilizing a special borosilicate filter window, dangerous ultraviolet radiation (UV-B and UV-C) have been eliminated and minimum visual and infra-red energy is transmitted.

To enable flexibility, mounting points are provided which allow accessories to be used with the fixture to externally control the light output (douser, barn doors, etc.).

Basic control interfacing is performed on the rear of the fixture. An illuminated display shows either the fixture address or lamp life hour meter mode (user selectable) for simplicity of fixture control.

The fixture incorporates standard 5-pin XLR ports for the use of daisy chaining in a DMX control environment.

To enable quick and easy installation, the fixture is provided with a truss clamp attached to the yoke. The clamp will accommodate 1-1/2" to 2" (38-50 mm) diameter pipes. Alternately, the yoke incorporates a 1/2" (13 mm) hole to accommodate either a Baby or Standard pin for use on a stand. NOCTURN recommends that the supplied safety cable be attached during installation to prevent the fixture from dropping.

* The lamp must be allowed to remain OFF for at least 3 minutes before a hot re-strike attempt. Attempts to hot re-strike the lamp sooner than the specified time may result in the activation of the ignitor circuit disabling switch, preventing further strike attempts unless the fixture power is recycled. Full output will be attained within 3 minutes after re-ignition.
System Specifications

DMX Specifications

Compatibility per USITT (1992).

Electrical Specifications - 600 Watt Fixture

Lamp type............................NOCTURN UV Enhanced Double-Ended Linear HID
Lamp Power (Nominal)..............................600 Watts
Lamp Life.............................................1,000 Hours/ Optimal UV-A Output
Input Line Voltage.........................115 or 230 VAC nominal (Assigned at Factory)
Input Line Current....................................10A (115V) or 5A (230V)
Input Line Frequency...............................50/ 60Hz
Ballast type.........................................Electronic with High Voltage Igniter
Fixture Weight ..................................................33 Lbs.
Dimensions........................................11.5” High x 13.3” Wide x 14.5” Long

Allowable Ambient Conditions

Operating Temperature..........................40°F - 122°F (4°C- 50°C)
Storage Temperature.............................-40°F- 122°F (-40°C- 50°C)
Humidity......................................................0- 90% (Relative)
II. RECEIVING, INSPECTION AND STORAGE

The NOCTURN UltraViolet Light Source is packaged and sent to you following the best commercial practices. However, handling and transportation can result in damage. The following sections will assist you should this occur.

Receiving and Handling

Inspect the fixture container for signs of damage during the shipment process, always in the presence of the shipping carrier. Open the container and carefully remove all packing material. Check the contents against the packing slip included with the container and inspect the fixture for any obvious visual damage. Noted damage should be immediately reported to the carrier’s agent. Keep all packing intact with the container for storage or returns.

Always furnish the model number and serial number (located on the back cover) when information is needed concerning the fixture. This will assist with an expedient response.

Following the initial inspections, the fixture and related hardware should be placed back into the shipping container if installation is not immediate. Fold the flaps and interleave or tape them down. This will insure the contents remain protected and ready for installation.

System Inspection

The fixture must be inspected prior to use according to the following procedure. Should there be any irregularities found, do not use the fixture. Consult the trouble shooting section of this manual. If the problem is not solved, call NOCTURN for technical assistance.

1) Visually inspect the power cord, plug and safety cable to be sure there is no evidence of damage caused by fraying or kinking. The plug should have all terminals clean and straight.
2) Inspect the filter window in the front of the fixture and verify no cracks exist; the window should be a singular piece of dark glass. Small waves seen on the surface are acceptable.
3) Locate the lamp in the packaging and verify that there are no cracks or loose contacts on the ends. A typical lamp will have a small film that is mirror-like or has micro-droplets deposited on the interior of the bulb envelope surfaces. This is normal.
Storage

The fixture should remain closed and the lamp removed if long term storage is necessary. The lamp should be placed back into its original container and kept with the fixture for re-installation. The fixture may be stored in an open environment where dirt or dust accumulation can be avoided. The power cord may be wound around the fixture or bundled together, preventing sharp kinks. The original shipping container is suitable for a short or long term storage solution that offers maximum protection when the fixture is not installed.
III. SYSTEM INSTALLATION

The fixture can be used in various locations with a minimal amount of installation time and effort. While the most common installation is to a pipe or truss, the fixture can be easily changed for use on a stand.

Installation and Adjustment

The fixture comes with a heavy-duty clamp as a standard item (packaged separately). It is capable of fastening the fixture to 1-1/2” to 2” (38-50 mm) diameter tubing.

1) Attach the clamp to the outside of the yoke by inserting the 1/2” bolt through the hole in the yoke with the bolt head and washer on the inside surface. Orientate as desired and tighten as much as possible.
2) Loosen the two knobs located on either side of the fixture and orientate the yoke to approximately the final elevation (if necessary). Retighten knobs.
3) Loosen the clamp knob and allow the drop link to move freely.
4) Place the clamp over the truss or tubing by moving the drop link away from the opening. The fixture weight load should now be supported by the clamp.
5) Place the drop link inside the square head bolt and tighten the clamp knob as much as possible after fixture is in desired position.
6) Attach the supplied safety cable around the fixture handle and truss or tube.

To make other minor adjustments, loosen the side knobs slightly and rotate the fixture by the handle on the rear cover to the desired position. Retighten knobs.

Prior to leaving the fixture after initial installation or any adjustment, verify all knobs are completely tightened and the safety cable is in place.

For use with a stand, remove the bolt and replace the clamp with the preferred adapter pin. Store the clamp in a safe place for future use if needed.

Accessories

The fixture comes standard with integral accessory mounting points that accept standard entertainment lighting accessories (dousers, frames, barndoors, etc.). Two slots are available and will accommodate 10” accessories. The accessories may be installed by sliding the frame or clips of the accessory into the slots of the mounting points. All accessories should be attached to the fixture with a safety cable provided by the accessory manufacturer or the installer.
IV. SYSTEM INTERFACE AND OPERATION

The following section will provide all necessary operational information for the various functions of the fixture. Depending on installation requirements, the fixture may be used in a conventional manner (manual mode), or will support the use of DMX-512 protocol for digital lighting control.

Control Interface

Rear Cover

The controls for the fixture are found on the back cover and consist of several components. These include a display, integral selection buttons, power switch/ circuit breaker, and two DMX ports (input and through). Other items located on this panel are the power cable with strain relief and carrying handle.

![Control Interface Diagram]

Function Display

The display and related buttons serve to track lamp life in hours and select fixture address. Whenever the fixture is turned ON, the display will remain active for approximately 5 minutes. This time will extend to approximately 5 minutes after the last function or selection input is made to the fixture (after it first turned ON) and additional control interfacing is necessary. After approximately 5 minutes, the display will extinguish and remain in a “sleep” mode. The fixture will remain like this until the selection button is depressed once. If it is necessary to see the display (read lamp hours or to change the fixture address), press the FUNCTION SELECTION BUTTON and the display will reactivate. After the initial 5 minutes the fixture is ON, the display will remain active for 30 seconds after the last function or selection button is depressed before returning to the “sleep” mode.
Manual Operation Mode

The manual operation will allow the fixture to be used in a conventional manner where power to the fixture is manually switched ON for “stand alone” use. This is done by pressing the power switch/ circuit breaker to the ON position.

1) Plug the power cord into a power source and push the power switch/ circuit breaker to the ON position.
2) The display will energize and show the TIMER mode - select ADDRESS mode by depressing the FUNCTION SELECTION BUTTON (diamond). The display should read “A” followed by three digits.
3) The fixture display is initially preset at the factory to the address “A000” when it arrives. If this address is not displayed, press the NUMERIC SELECTION BUTTONS (triangles) until the display reads “A000”. The relay within the fixture will close and the lamp will ignite. Full lamp output is attained within 5 minutes.

NOTE: The NUMERIC SELECTION BUTTONS scroll with ascending numbers, from “0” to “9” before recycling to “0”.
DMX Operation Mode

In DMX operation, the fixture will be used in an installation where it is desirable to control several fixtures and related accessories with the use of sophisticated lighting programs or equipment (DMX source). This is most suitable for applications where all aspects of lighting are to be fully digitally programmed and executed. Typical installations require fixtures and related accessories to be "addressed" so that they may be controlled with a DMX source.

1) Plug the power cord into a power source and push the power switch/ circuit breaker to the ON position.
2) The display will energize and show the TIMER mode - select ADDRESS mode by depressing the FUNCTION SELECTION BUTTON (diamond button). The display should read “A” followed by three digits.
3) Press the NUMERIC SELECTION BUTTONS (triangles) until the display reads “A” followed by the DESIRED FIXTURE ADDRESS.
4) Plug the DMX cable from the DMX source into the INPUT port on the rear cover of the fixture.
5) When DMX 512 signals are detected (DMX level above 80%/ 204 - 255), a relay within the fixture will close and the lamp will ignite. Full lamp output is attained within 5 minutes. The display will also show a decimal point between the “A” character and the first “0” digit when DMX is detected.
6) When signals from the DMX source are detected (DMX level below 20%/ 000 - 051) the fixture relay will open and the lamp will extinguish, but the fixture will remain ON.

In most applications where DMX operation is utilized, it is common to “daisy-chain” or link several other fixtures and accessories together. This eliminates the need to connect individual cables from the DMX source to each item.

7) Plug DMX cable into the THROUGH port on the rear cover of the fixture. Connect opposite end into next desired DMX accessory or fixture. The UV fixture will monitor incoming signals, process those to which it is addressed, and pass all other signals through (use terminator at last fixture).

Display window for DMX Mode (Example Display)
Hot Restrike Operation

The fixture’s Ballast and Igniter circuitry allow the lamp to have “hot restrike” capabilities. The fixture must be allowed to cool approximately 3 minutes before an ignition attempt can be made, after the fixture has been operating. The igniter will attempt to strike the lamp for approximately 3-5 seconds (audible high frequency “buzzing” sound originating from fixture interior). If the lamp has not ignited during this time, an internal disabling switch within the igniter will activate and prevent any further ignition attempts until the power is removed to the igniter and the ignition circuit has cooled sufficiently.

The lamp will attain greater than 50% of the full output within 10-15 seconds, and full output will be attained in no more than 3 minutes. Various factors, including the length of time the fixture was operating, may allow the lamp to reach full lamp in less time.

For MANUAL OPERATION,

1) Press the fixture’s Circuit Breaker to the OFF position.
2) Allow the Igniter to reset for approximately 1 minute.
3) Press the Circuit Breaker to the ON position.

The lamp should ignite. If this does not happen, repeat this process until the lamp strikes.

For DMX OPERATION,

1) Reduce the DMX signal level below 20%/ 000 - 051.
2) Allow the Igniter to reset for approximately 1 minute.
3) Increase the DMX signal level above 80%/ 204 - 255.

The lamp should ignite. If this does not happen, repeat this process until the lamp strikes.
Lamp Hour Meter Mode

The display can be changed to a resetable hour meter that keeps a memory of total elapsed lamp hours while ignited. This feature is useful in determining when a lamp should be replaced. Output and performance will dramatically decrease while the possibility of lamp failure will increase if the lamp is allowed to operate past its maximum rated life. All NOCTURN lamps have a maximum rated life of 1,000 hours peak UV-A intensity.

The HOUR METER mode will always display 4 digits, between “0000” and “6535” (unlike the DMX ADDRESS mode that will display an “A” character followed by 3 digits). The timer can reach a maximum “6535” hours, and will rollover to “0000” when it is exceeded.

1. Plug the power cord into a power source and push the power switch/circuit breaker to the ON position.
2. The display will energize and show the HOUR METER mode. The display will show 4 digits total, “0000” to “6535”. The fixtures should arrive from the factory preset at “0000” when the HOUR METER mode is active.
3. To reset the HOUR METER to “0000”, depress all three NUMERIC SELECTION BUTTONS (triangles) together and hold for approximately 5 seconds or until the display shows “0000”.

The display (when active) will show a moving decimal point when the HOUR METER mode is active and the lamp is operating. The decimal point will float across the bottom of the display from the left to right. This indicates the relay within the fixture is closed and the lamp is ON.

When the HOUR METER mode reaches 1,000 hours (elapsed lamp life), the display (when active) will move from a steady state to flashing state. This indicates the lamp has reached its maximum rated life and should be changed. Follow the instructions for resetting the timer to have the display reset to a steady state.
V. SERVICING

THE FOLLOWING SERVICE SECTION OUTLINES MAINTENANCE PROCEDURES. ALL SERVICING SHOULD BE PERFORMED BY QUALIFIED SERVICE PERSONNEL.

The front cover containing the filter window should only be opened for lamp replacement or maintenance. Observe all warnings and cautions provided in this Operator's Manual before initiating any service procedures. Refer all other electrical or mechanical problems to qualified NOCTURN technical personnel.

WARNING: Do not subject the lamp or fixture to extreme mechanical shock or rough handling that may damage the lamp or internal components.

DANGER: Disconnect the main power cord prior to attempting any service to the lamp or fixture.

Lamp Replacement

The lamp should be replaced when it has reached its maximum rated life of 1,000 hours. See section VI (page 21) for replacement lamp part numbers.

For safety reasons, NOCTURN recommends that soft cotton gloves be worn when handling the lamps during the following LAMP REPLACEMENT procedure.

1) Push the power switch/ circuit breaker to the OFF position.
2) Unplug the fixture. Wait a minimum of 10 minutes for the lamp to cool before proceeding if the fixture was operating.
3) Open the front cover by pushing the lock tab of the latch forward, then lift the catch link up and forward. Carefully lower the front cover until it supports itself.
4) Grasp one end of the lamp and push in axially towards the socket, (compress the socket). DO NOT PROCEED IF THE LAMP IS STILL HOT.
5) While one end is compressing the socket, rotate the opposite end towards the front of the fixture.
6) Completely remove the lamp and properly dispose of it.
7) To install a new lamp, hold one end of the lamp and engage the opposite end into the socket. Compress the socket with the lamp and swing the end that is being held until it fully engages the other socket contact.
8) Visually ensure the lamp is fully engaged into both sockets and can rotate axially between the contacts with ease.
9) Rotate the lamp so the fill tube pinch (bump) is orientated to the top. This will help with the lamp ignition sequence and overall life.
10) Clean the entire lamp with a swab soaked in isopropyl alcohol to remove any contaminants or oils, and completely dry with a lint-free cloth.
11) Close and secure the front cover with the latch.
12) Reset the lamp hour meter (See page 12).
Main Power Switch/ Circuit Breaker

A circuit breaker is used to prevent damage to the fixture and internal components from an over-current condition. The POWER SWITCH/ CIRCUIT BREAKER, located on the back cover, controls the power to the fixture while also offering over-current protection.

1) Press the POWER SWITCH/ CIRCUIT BREAKER to the ON position. The fixture is now operational.
2) Should the fixture POWER SWITCH/ CIRCUIT BREAKER trip due to an over-current condition, the switch will automatically return to the OFF position.
3) To reset the POWER SWITCH/ CIRCUIT BREAKER, push the switch to the ON position again.

NOTE: If the POWER SWITCH/ CIRCUIT BREAKER continues to trip, or trips immediately after it has been reset, unplug the fixture and remove for further servicing. Contact NOCTURN for technical service.
Maintenance/ Cleaning

Proper maintenance of a lighting system is necessary to provide the highest available levels of output illumination. Costly damage and major repairs may be prevented by periodic inspection of the lighting fixture. A scheduled maintenance program can increase safety and minimize down-time associated with the fixture operation, as small problems may be caught in an early stage preventing further damage.

Before attempting any maintenance or cleaning, the fixture must be turned OFF, unplugged and allowed to cool if it has been in operation. It is recommended that lamps be replaced as a group at scheduled intervals based on maximum rated life. The following list suggests inspection points during periodic maintenance.

- Overall fixture exterior condition
- Correct function of controls
- Protective filter window and guard
- Lamp condition
- Lamp sockets
- Reflector optical condition
- Integrity of seals

The exterior of the fixture has many fins used to dissipate the heat during normal operation and should be free of any accumulation of dust and dirt. Large accumulation of dust or dirt will diminish the cooling efficiency and/or cause a safety hazard. The exterior may be cleaned with a dampened cloth and a mild detergent. An intake shield on the rear cover and several exhaust vents on the front cover allow air to circulate and cool interior components. These must be free of obstructions and dirt accumulation.

The rear cover containing all functional controls should be wiped with a damp cloth and mild detergent if any dirt or dust accumulation is present. The display should be easily seen and should operate correctly in all modes.

The front window should be examined for cracks and replaced if any are found. The window should be cleaned of excessive dust or dirt accumulation with normal glass cleaning products or isopropyl alcohol. The attached guard should be firmly secured to aid in window protection.

Lamps should be inspected to ensure maximum output is available and the fixture is operating normally if they appear...

- Dim, slow starting or inoperative
- Visually discolored, such as a blackened arc tube or melted ribbons
- The arc tube is blistered or swollen abnormally.
Any lamp that has reached its maximum rated life should be replaced immediately, regardless of the visual appearance or output. After a lamp has been replaced, completely clean all surfaces with isopropyl alcohol for maximum performance and life.

The lamp socket assemblies should be inspected before replacing a lamp. The contacts on either side should be free from any surface contamination or damage and the terminals should be securely connected. Remove contaminants if any are noted. Any damaged socket assemblies may effect lamp operation and overall performance, and should be replaced.

The reflector is responsible for capturing and directing the energy emitted from the lamp. The reflectors in all NOCTURN fixtures have been designed for optimal performance while transmitting maximum UV energy from the lamp and providing a smooth, even field. Inspect the reflector for dirt and dust, or residue accumulation. Wipe the reflective optical surfaces surrounding the lamp with isopropyl alcohol to clean the reflector.

Periodically inspect the seals on the front and rear covers, as well as around the window. They should be replaced if any signs of damage or deterioration are noted. These prevent moisture and other elements from entering the fixture and preventing extraneous light from escaping.

**Trouble Shooting**

Any repairs or maintenance other than those listed in the following section should be referred to NOCTURN UltraViolet Effects or qualified repair technicians. Please have the fixture model number and serial number available so that NOCTURN may answer any questions completely and accurately.

<table>
<thead>
<tr>
<th>SYMPTOM</th>
<th>PROBABLE CAUSE</th>
<th>SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamp fails to ignite</td>
<td>Power cord is not plugged in or the source is not energized.</td>
<td>Plug into source that has suitable electricity available.</td>
</tr>
<tr>
<td></td>
<td>Power Switch/ Circuit Breaker is not in the ON position.</td>
<td>Push to the ON position.</td>
</tr>
<tr>
<td></td>
<td>Incorrect fixture address.</td>
<td>Set to “A000.”</td>
</tr>
<tr>
<td></td>
<td>TIMER display shows lamp has exceeded rated life.</td>
<td>Replace lamp if it has passed the maximum rated life (1,000 hours).</td>
</tr>
</tbody>
</table>
| **Lamp fails to ignite**  
*continued* | **Lamp fails to ignite**  
*hot re-strike* | **Power Switch/ Circuit Breaker Trips** | **Fixture Display is Inoperative** |
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lamp failure. Replace lamp if any abnormalities or damage to the envelope or contacts are present.</td>
<td>Lamp has not cooled sufficiently. Allow at least 2 minutes for lamp to cool after it has been extinguished.</td>
<td>Power source over-current condition. Check power source for correct Voltage and Current ratings.</td>
<td>Power cord is not plugged in or the source is not energized. Plug into source that has suitable electricity available.</td>
</tr>
<tr>
<td>Socket failure. Remove any contamination or replace if damage is found.</td>
<td>Igniter circuit disabled. Recycle fixture power.</td>
<td>Wires are shorting on or within the fixture. Repair as necessary to prevent future shorting.</td>
<td>Power Switch/ Circuit Breaker is not correctly operating. Replace if damage is found.</td>
</tr>
<tr>
<td>Safety interlock is not engaged. Interlock rod must contact the window when the front cover is secured and moves freely when not engaged.</td>
<td></td>
<td>Power Switch/ Circuit Breaker is not in the ON position. Push to the ON position.</td>
<td>FUNCTION SELECTION BUTTON is not operating. Display should reactivate when the button is pressed.</td>
</tr>
<tr>
<td>Membrane switch ribbon cable is not fully connected to DMX board. Connect termination header into DMX board.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Fixture Display is Inoperative (continued)</strong></td>
<td>Internal power terminals are not connected.</td>
<td>Connect termination plugs if unplugged.</td>
<td></td>
</tr>
<tr>
<td>DMX Controls are not functioning</td>
<td>DMX source signals are not being conducted.</td>
<td>Cables must be fully connected into ports.</td>
<td></td>
</tr>
<tr>
<td>DMX Controls are not functioning</td>
<td>Internal fuse blown.</td>
<td>Replace fuse.</td>
<td></td>
</tr>
<tr>
<td>DMX Controls are not functioning</td>
<td>Cables must conduct signals and be free of damaged to wires or terminals.</td>
<td>Verify correct signal levels are originating from DMX source and are being conducted through the cables.</td>
<td></td>
</tr>
<tr>
<td>DMX Controls are not functioning</td>
<td>Incorrect fixture address.</td>
<td>Verify the fixture is correctly addressed.</td>
<td></td>
</tr>
<tr>
<td>Output is Dim</td>
<td>Verify the DMX source is correctly addressing the fixture.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Output is Dim</td>
<td>Obstructions in front of fixture; window has contamination.</td>
<td>Remove obstructions; clean window of any dirt, dust or residue buildup.</td>
<td></td>
</tr>
<tr>
<td>Output is Dim</td>
<td>TIMER display shows lamp has exceeded rated life.</td>
<td>Replace lamp if it has passed the maximum rated life (1,000 hours).</td>
<td></td>
</tr>
<tr>
<td>Output is Dim</td>
<td>Lamp failure.</td>
<td>Replace lamp if any abnormalities or damage to the envelope or contacts are present.</td>
<td></td>
</tr>
<tr>
<td>Output is Dim</td>
<td>Socket failure.</td>
<td>Remove any contamination or replace if damage is found.</td>
<td></td>
</tr>
</tbody>
</table>
Warranty

NOCTURN UltraViolet Visual Effects warrants that the lighting fixture is fit for the purposes and indications described in the labeling for a period of one year after the date of shipment when used in accordance with the prescribed directions for use. Unless the equipment and/or lamp is used in accordance with such instructions, this warranty is void and of no effect. There are no other expressed or implied warranties. NOCTURN UltraViolet Visual Effects sole obligation and purchaser’s exclusive remedy for breach of any warranty shall be limited to repair or replacement of the product at NOCTURN’s option. NOCTURN UltraViolet Visual Effects shall not be held liable for proximate, incidental or consequential damages.

Prices, specifications and model availability are subject to change without notice.

VI. REPLACEMENT PART NUMBERS

When it is necessary to order parts, always state the fixture’s Model Number and Serial Number located on the back cover. This will assist NOCTURN in filling the order correctly and promptly.

The following charts and fixture assembly drawings describe user serviceable components and general locations within the fixtures.

NOCTURN 600 Watt UV Lamp
388-0600

Replacement Lamp
### 600 Watt UV Fixture

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
<th>PART NUMBER</th>
</tr>
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<tbody>
<tr>
<td><strong>Replacement Lamp</strong></td>
<td></td>
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<tr>
<td>42</td>
<td>Lamp, UV enhanced 600W</td>
<td>388-0600</td>
</tr>
</tbody>
</table>

**Figure 1**

1. Clamp, Truss | 323-0202 |
2. Yoke | 680-8034 |
3. Knob | 471-0013 |
4. Screw, 8-32 x 2-1/2" Round Head | 41-51087 |
5. Fan, 115 V.AC Axial | 61-98002 |
5. Fan, 12 V.DC Axial (Export) | 300-0054 |
- Capacitor (not shown; for DC Fan) | 31-08008 |
- Rectifier (not shown; for DC Fan) | 21-17003 |
6. Decal, Overlay Active Membrane | 680-8220 |
7. XLR Connector Assembly, Through | 992-8241 |
8. XLR Connector Assembly, Input | 992-8242 |
9. Handle | 900-0020 |
10. Decal, Overlay Logo | 680-8242 |
11. Fabrication, Shield Intake | 680-8215 |
12. Spacer | 415-6001 |
13. Intake Trap Mount | 415-6001 |
14. Power Cord Assembly, European | 992-0798 |
15. Back Casting | 680-8219 |
16. Circuit Breaker | 710-0077 |
17. End Seal | 680-8036 |
18. Screw, 8-32 x 1" | 338-1083 |
19. Housing Assembly, Nocturn 600 | 325-0467 |
20. Wire Guard | 680-8027 |
21. Screw, 8-32 x 1/4" Button Head | 338-2503 |
22. Hinge Pin (2 req'd.) | 323-0220 |
23. Front Casting | 680-8056 |
24. Latch Assembly | 323-0205 |
25. RTV Silicone Sealant (3 oz. Tube) | 11-98069 |
26. Window, UV Filter | 680-8028 |
27. Seal, Window | 680-8029 |
28. End Seal | 680-8036 |
29. Reflector, Flood | 680-8252 |
30. Washer, Friction | 325-2470 |
31. Screw, 1/2-13 x 1" Hex Head* | 41-51449 |
- Lockwasher, 1/2" Shakeproof* | 41-70025 |
- Flat Washer, 1/2** | 00856000 |

* Included with Item 1 Clamp
### 600 Watt UV Fixture

<table>
<thead>
<tr>
<th>ITEM</th>
<th>DESCRIPTION</th>
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<tbody>
<tr>
<td>32</td>
<td>Interlock Switch Bracket</td>
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<td>Microswitch, Interlock</td>
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<td>34</td>
<td>Fuseholder</td>
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<td>35</td>
<td>Fuse, Circuit (Export, 220/240V)</td>
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<tr>
<td>35</td>
<td>Fuse, Circuit (Domestic, 120V)</td>
<td>561-0103</td>
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<td>36</td>
<td>Ballast, 600 Watt</td>
<td>31-98383</td>
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<td>37</td>
<td>Screw, 4-40 x 1/4&quot;</td>
<td>334-3710</td>
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<td>38</td>
<td>DMX Circuit Board</td>
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<td>39</td>
<td>Spacer</td>
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<td>40</td>
<td>Bulkhead Plate</td>
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<td>41</td>
<td>Socket Assembly, High Voltage</td>
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<td>Lamp, UV enhanced 600W</td>
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<td>Socket Assembly, Neutral</td>
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<td>Bulkhead Bracket (2 req’d.)</td>
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<td>Igniter Assembly</td>
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<td>Bracket, Interlock Rod</td>
<td>680-8211</td>
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<td>48</td>
<td>Rod, Interlock</td>
<td>680-8040</td>
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<td>49</td>
<td>Threaded Spacer</td>
<td>322-0124</td>
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<tr>
<td>50</td>
<td>Transformer, 120/ 240V - 12V</td>
<td>800-0045</td>
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</tbody>
</table>

**Figure 2**
Dimensional Drawing
Spectral Transmission Chart
250 Watt Spot Fixture - 50 Degree Field/ 150' Throw
250 Watt Flood Fixture - 92 Degree Field/ 100' Throw
400 Watt Flood Fixture - 96 Degree Field/ 150' Throw
600 Watt Flood Fixture - 96 Degree Field/ >200' Throw

Note: Edge of field is 10% of peak intensity at ± 0 degrees A.O.I. Throw is the distance at which intensity reaches 1 microwatt/ sq. Centimeter at ± 0 degrees A.O.I. Useful intensity levels vary with ambient light and other environmental conditions.