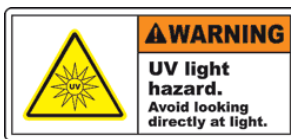


UV8 & UV90 SERIES INSTALLATION INSTRUCTIONS

Important THIS SHEET CONTAINS IMPORTANT SAFETY INSTRUCTIONS.
SAVE THESE INSTRUCTIONS.

Warning

- This product must be installed in accordance with National Electrical Codes and all other local codes by a person familiar with the construction and operation of the product and the hazards involved.
- To prevent electrical shock, turn off the power during installation or maintenance.
- To reduce the risk of fire, keep away from combustible materials.



This product contains UV LEDs with a narrow UVA spectral range (365nm peak). Do not look directly into the UV light during operation. Exposure to UV light can cause damage to the skin and eyes. Always use UV blocking eye protection.

Purpose of This Sheet

The purpose of this sheet is to provide step-by-step instructions to help you:

- Install the fixture with any of the following fittings: -00 fitting on an LSI track, -5A canopy, -5EU canopy, -2A universal flange fitting, -3A mega clamp fitting, or -BUS on LSI Busway.
- Install accessory holder.
- Install accessories: Barn Door and Hood.
- Aim the fixture.
- Replace LED board.
- Replace LED drivers.
- Use DMX Control.

Product Overview

The UV series is a LED black light that can produce a super spot to a wide flood of ultraviolet light at 1/5th the power of conventional black lights. The luminaires use high efficiency UV LEDs to deliver high outputs of ultraviolet energy tuned to narrow 365nm peak wavelength. The absence of visible light is achieved without the use of a special filter. The LEDs have a lifetime of 10,000 hours at L90 (90% of initial output). See the fixture label for voltage and wattage input.

Please consult our *Product Catalog* or web site for available accessories.



Dimming

- The UV series is dimmable using compatible low-voltage electronic dimmers.
- Other available dimming options include, forward phase, 0-10V, integral dimming, and DMX control. Consult factory for details on dimming options.

Installing the Fixture with the -00 Fitting on an LSI Track or -BUS Fitting on Busway

FOR USE WITH LSI 3, 4, 5, 6, 8, 9 AND BUSWAY SERIES TRACK.

NOTE: BUSWAY FITTINGS CAN ONLY BE USED ON LSI BUSWAY TRACK AND -00 FITTINGS CAN ONLY BE USED ON LSI 3, 4, 5, 6, 8, AND 9 SERIES TRACK.

INSTALLATION INSTRUCTIONS: The track or busway must already be installed according to code requirements. When installing or using this track, basic safety precautions should always be followed, including the following:

- Read all instructions.
- Do not install any part of a track less than 5 feet above the floor (8 feet for 277V).
- Do not install any fixture closer than 6 inches from any curtain or similar combustible material.
-

STEP	ACTION
1	Flip the fitting switch off and open the fitting handle (Fig. 1).
2	Are you using a one-circuit or two-circuit system? <ul style="list-style-type: none"> ▪ <i>If one-circuit</i>, make sure the brass contacts that protrude from the side of the fitting face the copper busbars inside the track. ▪ <i>If two-circuit</i>, inserting the fitting in one direction connects to circuit one. Removing and reversing the direction of the fitting connects to circuit two.
3	Insert the fitting straight up into the track until fully seated (Fig. 2).
4	Close the handle (Fig. 3).
5	Install Track Fitting Safety Clamp over opposite end of the fitting from the switch, making sure the metal clamp overlaps the plastic fitting (Fig. 4). Tighten head of recessed hex bolt using a socket driver until the clamp is firmly secured to the track.
6	Loop integral safety cable through the hole in the yoke, and attach cable back to itself using the supplied carabineer clip (Fig. 5).
7	Close the handle and flip the fitting switch "ON". WARNING: Do not look directly at the lit LED.
8	To remove the fitting, flip the fitting switch to "OFF". Hold the fixture in place and remove the Track Fitting Safety Clamp. While still holding the fixture, open the handle and pull the fitting straight off the track.



Figure 1. Fitting with switch OFF and handle OPEN



Figure 2. Inserted fitting



Figure 3. Fitting handle closed



Figure 4. Track Safety Clamp placement

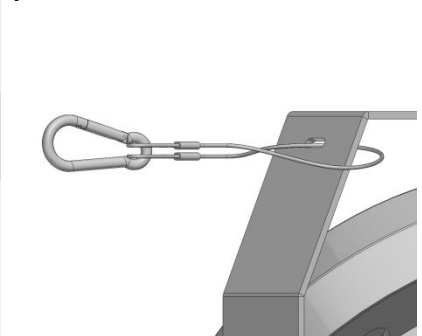


Figure 5. Safety cable installed through hole in yoke

Installing the Fixture with a -5A and -5EU Canopy

Before Installing: Consult the code requirements for fixture mounting. Mount the fixture to a ceiling constructed of non-combustible material, away from any flammable materials.

Installation of fixture with -5A Canopy, 120V/277V

STEP	ACTION
1	Turn off all power to wires for fixture.
2	The fixture with -5A Canopy can be mounted directly to a junction box with or without a ceiling.
3	Attach the canopy crossbar (Fig. 6) to a junction box with 2 screws (supplied by others).
4	Fasten the power wires (Fig. 6) from the junction box to the fixture wires. Note: Connect green to ground, black to the circuit line, and white to neutral.
5	Once connections have been completed, attach Canopy to junction box with two (2) canopy mounting screws supplied.
6	Install the safety cable through the hole in the yoke and around a major supporting structure then attach the two loops in the cable together using the supplied carabineer clip (Fig. 9).

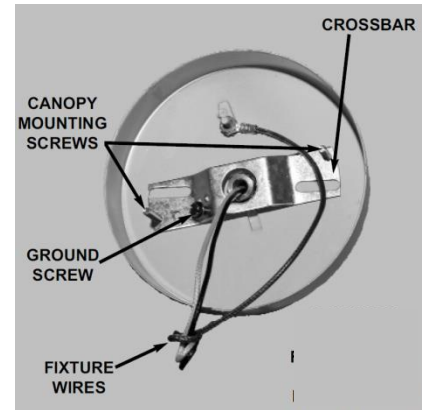


Figure 6. -5A ground and power wires with canopy crossbar

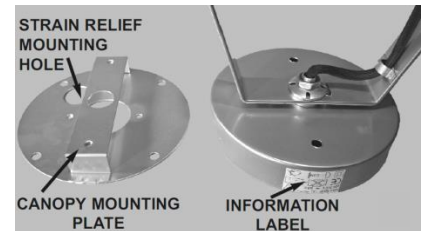


Figure 7. -5EU Canopy mounting plate and label

Installation of fixture with -5EU Canopy, 230V

STEP	ACTION
1	Turn off all power to wires for fixture.
2	The fixture with -5EU Canopy can be mounted directly to a ceiling with or without Besa box.
3	Mount Canopy Mounting Plate (Fig. 7) to ceiling with screws (supplied by others). Please check code requirements for fixture mounting and check Distance-From-Wall-Label on side of -5EU Canopy. Use outer bolt circle holes (4) to mount to ceiling. Use the two (2) holes near the large center hole to mount to Besa box.
4	Route mains wires through strain-relief bushing supplied and connect to terminal block inside canopy (Fig. 8). The Line-Neutral-Ground label indicates the proper wiring connection. Note: Connect green/yellow to ground, brown to the circuit line, and blue to neutral.
5	Once connections have been completed, attach -5EU Canopy to mounting plate with two (2) canopy screws supplied.
6	Install the safety cable through the hole in the yoke and around a major supporting structure then attach the two loops in the cable together using the supplied carabineer clip (Fig. 9).

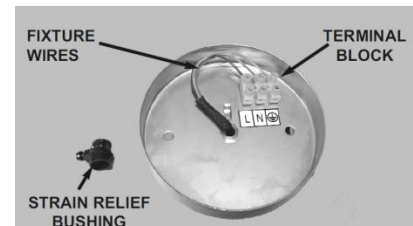


Figure 8. -5EU Canopy terminal block and strain-relief

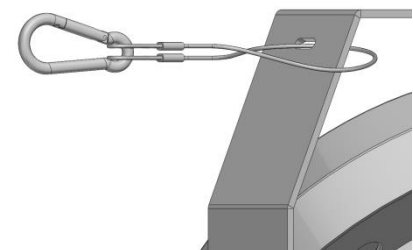


Figure 9. Safety cable installed through hole in yoke

Installing the Fixture with a -2A Universal Flange Fitting, or a -3A Mega Clamp Fitting.

Before Installing: Consult the code requirements for fixture mounting, and check the distance-from-wall label inside the fixture. Mount away from any flammable materials.

**For the -2A fitting, follow steps 1, 2, 4, 5, and 6.
For the -3A fitting, follow steps 1, 3, 4, 5, and 6.**

STEP	ACTION								
1	Turn off all power to the fixture.								
2	Attach the -2A fitting (Fig. 10) to any non-combustible material, using the 2-hole flanged mounting plate with 2 screws (supplied by others) or bolt-up applications, such as Unistrut or Kindorf systems.								
3	Attach the -3A fitting (Fig. 11) to a non-combustible pipe measuring 1 5/16" to 2 3/8", and then secure the fitting by turning the C-clamp bolt clockwise.								
4	Install the safety cable through the hole in the yoke and around a major supporting structure then attach the two loops in the cable together using the supplied carabineer clip (Fig. 12).								
5	Plug the fixture into a power source. IMPORTANT SAFETY INSTRUCTIONS This product has a polarized plug as a feature to reduce the risk of electric shock. This plug will fit in a polarized outlet only one way. If the plug does not fit fully in the outlet, reverse the plug. If it still does not fit, contact a qualified electrician. Never use with an extension cord unless the plug can be fully inserted. Do not alter the plug. <i>NOTE: Plug designation is dependent on voltage. See table below</i>								
	<table border="1"> <thead> <tr> <th>Fixture Voltage</th> <th>Plug</th> </tr> </thead> <tbody> <tr> <td>120V</td> <td>NEMA 5-15P</td> </tr> <tr> <td>230V</td> <td>SCHUKO CEE 7/7</td> </tr> <tr> <td>277V</td> <td>NEMA 7-15P</td> </tr> </tbody> </table>	Fixture Voltage	Plug	120V	NEMA 5-15P	230V	SCHUKO CEE 7/7	277V	NEMA 7-15P
Fixture Voltage	Plug								
120V	NEMA 5-15P								
230V	SCHUKO CEE 7/7								
277V	NEMA 7-15P								
6	Turn on the main power.								

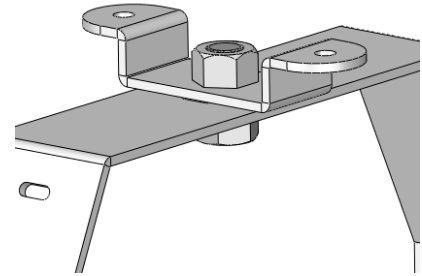


Figure 10. -2A universal flange fitting

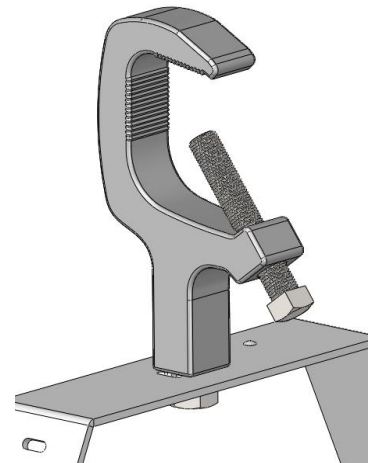


Figure 11. -3A C-clamp fitting

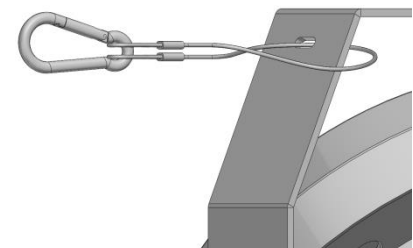


Figure 12. Safety cable installed through hole in yoke

**Installing
or
Removing
Reflector**

The UV8 series fixture is designed for use with interchangeable reflectors (82mm). The UV90 has a replaceable flood reflector (157mm).

**For the UV8, follow steps 1, 2, 4, and 5.
For the UV90, follow steps 1, 3, 4, and 5.**

STEP	ACTION
1	Turn off power to the fixture, including the fixture switch on the fitting, and let the LED cool. It is recommended to remove the fixture from its mounting for easier installation. WARNING: LED and fixture may be hot.
2	UV8 - Insert the new reflector by lining up the three tabs with the notches in the twist lock ring, and rotating clockwise until it is secured in place (Fig. 13).
3	UV90 – Insert reflector into fixture. Depress spring clips away from reflector until reflector is retained by all 4 spring clips (Fig. 14).
4	Reinstall fixture and restore power. WARNING: Do not look directly at the lit LED.
5	To remove reflector, repeat step 1. UV8 - Remove the reflector by turning it counter-clockwise, then pulling it out of the fixture UV90 - Depress spring clips away from reflector until reflector is able to be pulled out of the fixture

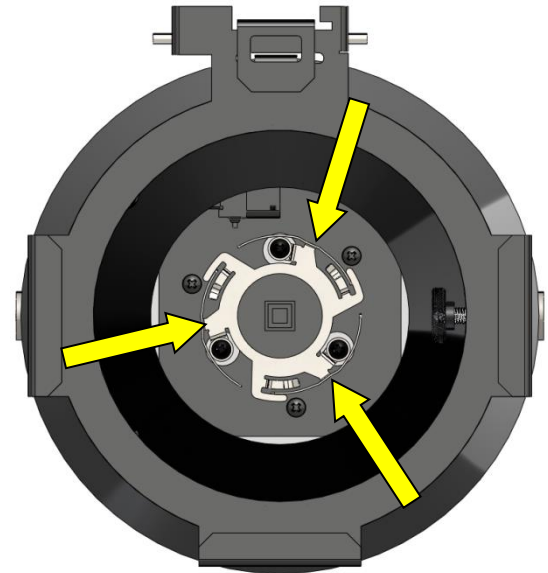


Figure 13. UV8 reflector twist lock ring

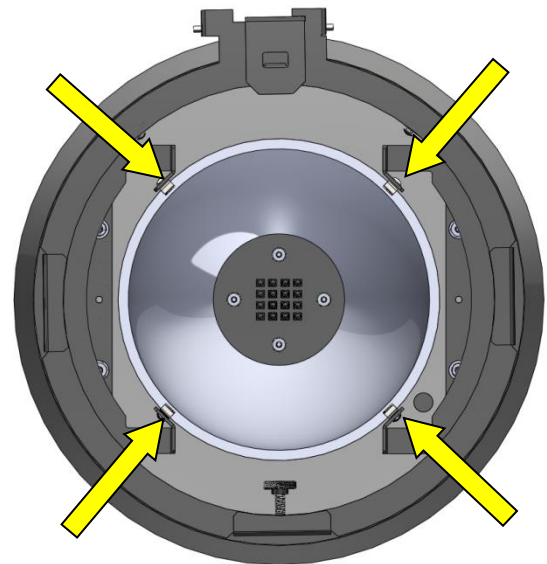


Figure 14. UV90 reflector spring clips

Installing or Removing Accessory Holder

The accessory holder is installed on the front of the fixture and is secured with a thumb screw and mounting tabs. Removal is accomplished by loosening thumb screw and pulling out the accessory holder.

NOTE: UV90 SHOWN TO THE RIGHT, UV8 IS PHYSICALLY DIFFERENT BUT HAS THE SAME PROCEDURE.

STEP	ACTION
1	Turn off power to the fixture, including the fixture switch on the fitting, and let the LED cool. It is recommended to remove the fixture from its mounting for easier installation. WARNING: LED and fixture may be hot.
2	Insert accessory into front of fixture. Angle accessory toward fixture when inserting to allow black tabs on accessory to clear the opening of the fixture. Once tabs clear the opening, rotate accessory toward fixture to seat it, making sure accessory flange sits flush with front edge of fixture housing. (Fig. 15 & 16) Rotate accessory to achieve desired orientation.
3	Locate the locking knob on the inside of accessory ring (opposite from the tabs). Turn knob clockwise until tight. (Fig. 17). Test that accessory is fully seated and does not move. If not fully seated, loosen locking knob fully, remove accessory and reinstall.
4	Reinstall fixture and restore power. WARNING: Do not look directly at the lit LED.
5	To remove accessory holder, repeat step 1. Locate the locking knob and turn counter-clockwise, until fully loosened. (Fig 17) Rotate the locking knob side of the accessory outward from the fixture, and lift out from the fixture. If the locking knob does not clear the fixture opening, loosen the locking knob further.



Figure 15. Insert accessory

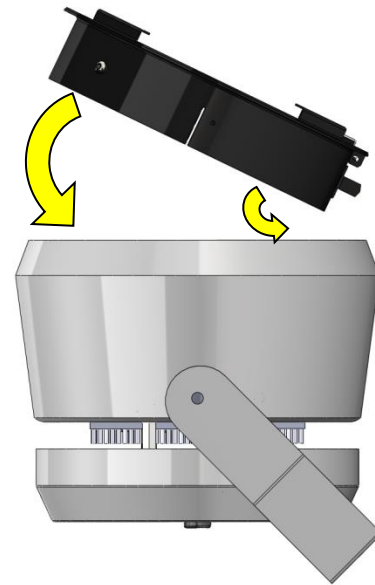


Figure 16. Insert accessory at an angle to allow black tabs to clear the fixture opening, and rotate into place



Figure 17. Rotate knob clockwise to lock accessory into place

Installing or Removing Barn Door and Hood

The barn door and hood accessories are installed in the accessory holder using a spring loaded clip. Removal is accomplished by releasing the spring loaded clip and sliding out the accessory.

NOTE: UV90 SHOWN TO THE RIGHT, UV8 IS PHYSICALLY DIFFERENT BUT HAS THE SAME PROCEDURE.

STEP	ACTION
1	Turn off power to the fixture, including the fixture switch on the fitting, and let the LED cool. It is recommended to remove the fixture from its mounting for easier installation. WARNING: LED and fixture may be hot.
2	Slide retaining clip to the left and rotate up away from the fixture (Fig. 18).
3	Slide accessory into holder (Fig. 19).
4	Slide retaining clip to the left and rotate down towards the fixture (Fig. 20).
5	Accessories have a mounting hole for a safety cable. Install the safety cable through the hole in the accessory and around a major supporting structure then attach the two loops in the cable together using the supplied carabineer clip.
6	Reinstall fixture and restore power. WARNING: Do not look directly at the lit LED.
7	To remove accessory, repeat step 1. Remove safety cable. Slide retaining clip to the left and rotate up (Fig. 18). Remove accessory from holder (Fig. 19).

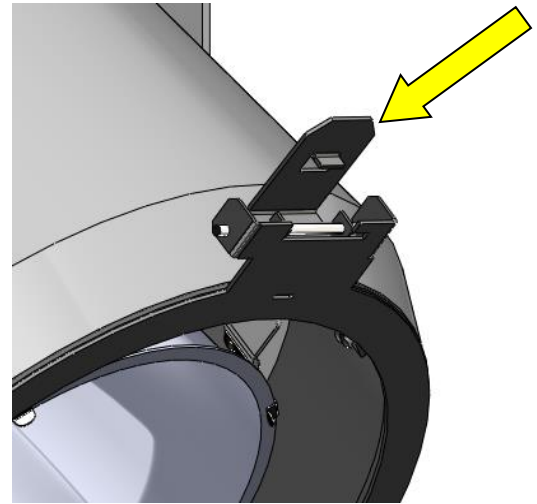


Figure 18. Release retaining clip

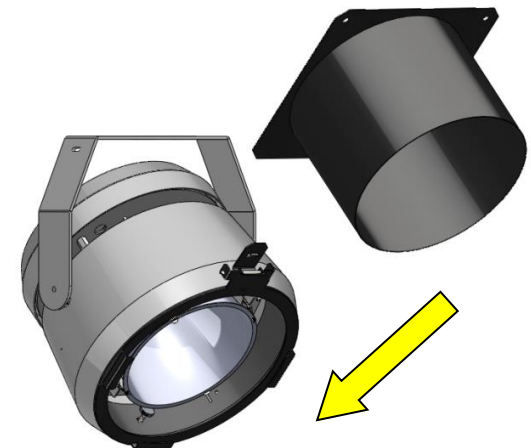


Figure 19. Slide accessory into holder

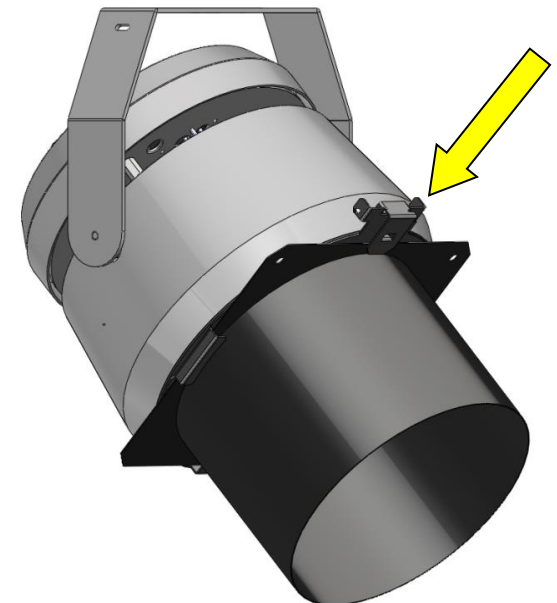


Figure 20. Lock retaining clip

Aiming and Locking Fixture

STEP	ACTION
1	<p>Turn off all power to the fixture, including the fixture switch on the fitting, and let the LED cool.</p> <p>WARNING: LED and fixture may be hot.</p>
2	<p>Do you want to aim the fixture horizontally or vertically?</p> <ul style="list-style-type: none"> <p><i>For horizontal aiming</i>, hold the yoke on either side of the fixture and turn it left or right until you achieve your desired orientation. Once desired position is achieved, lock the fixture in place by rotating the handle nut at top of fixture yoke. Rotate clockwise until fixture is locked (Fig. 21).</p> <p><i>NOTE: -2A and -3A fittings are mounted directly to the yoke by a ½" hex bolt, therefore a tool is required to horizontally lock the fixture.</i></p> <p><i>For vertical aiming</i>, hold the yoke and main housing. Angle the housing up and down until you achieve your desired orientation. Once desired position is achieved, lock the fixture in place by turning the locking ratcheting handle clockwise until fixture is locked. (Fig. 22).</p>
3	<p>Restore power.</p> <p>WARNING: Do not look directly at the lit LED.</p>

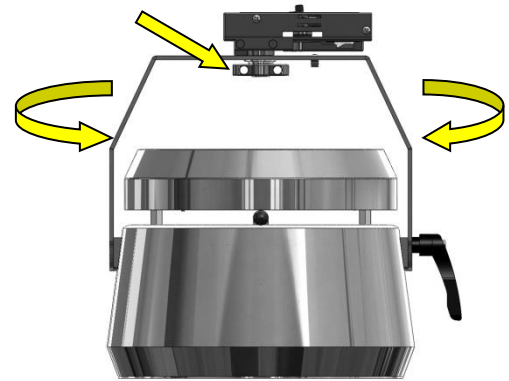


Figure 21. Turn fixture left or right to set the horizontal focus

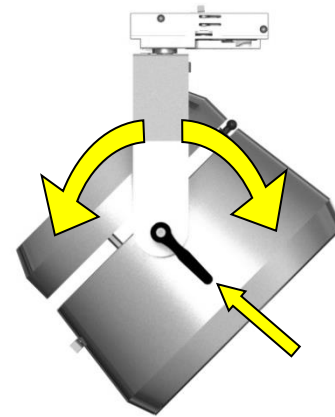


Figure 22. Angle fixture up or down to set the vertical focus

Replacing the UV LED Board

STEP	ACTION
1	Remove all power to the fixture, and let the LED board cool. Remove the fixture from its current location. Set on a clean firm work-surface with the LED board facing up. Remove accessory holder and reflector, refer to page 5 & 6. WARNING: LED Module and fixture may be hot.
2	Unplug the low-voltage LED power cable from the LED board.
3	UV8 - Remove the LED board by unscrewing the 6 Philip head screws securing it to the fixture (Fig. 23). UV90 - Remove the LED board by unscrewing the 8 hex nuts securing it to the fixture (Fig. 24). Save all hardware (screws/nuts, washers, lock-washers, reflector ring, and thermal pad) in a safe place for reinstallation.
4	Place new LED board into fixture. Install all hardware and securely attach LED board the fixture housing. (Fig. 23/24).
5	Plug the low-voltage LED power cable back into the new LED board.
6	Reinstall the fixture and restore all power to the fixture. WARNING: Do not look directly at the lit LED.

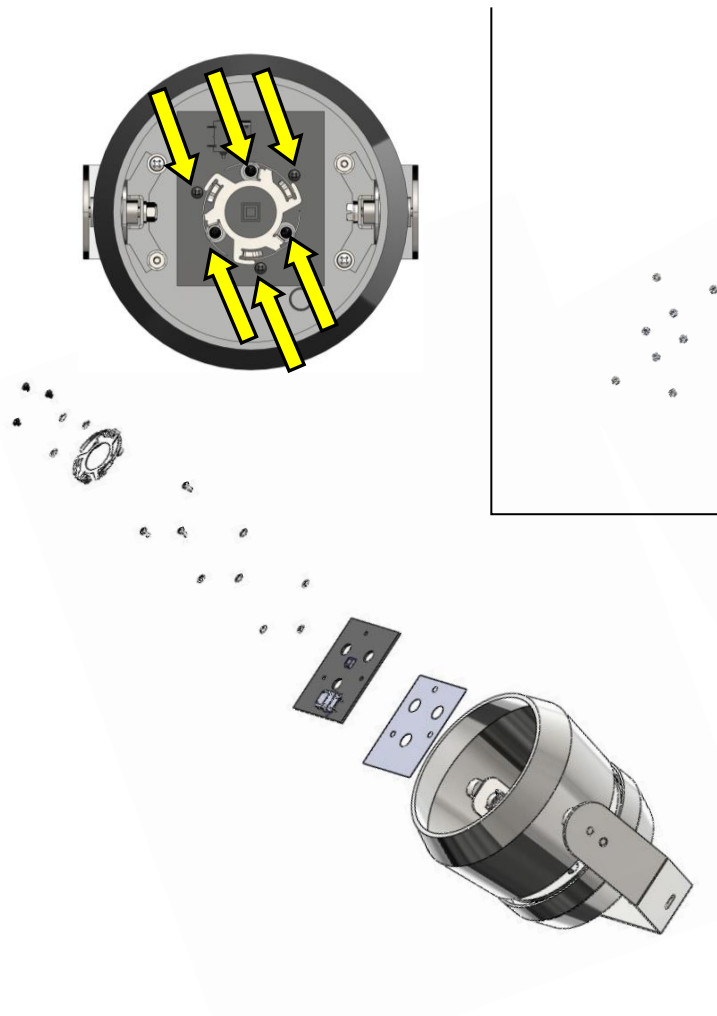


Figure 23. UV8 LED board replacement

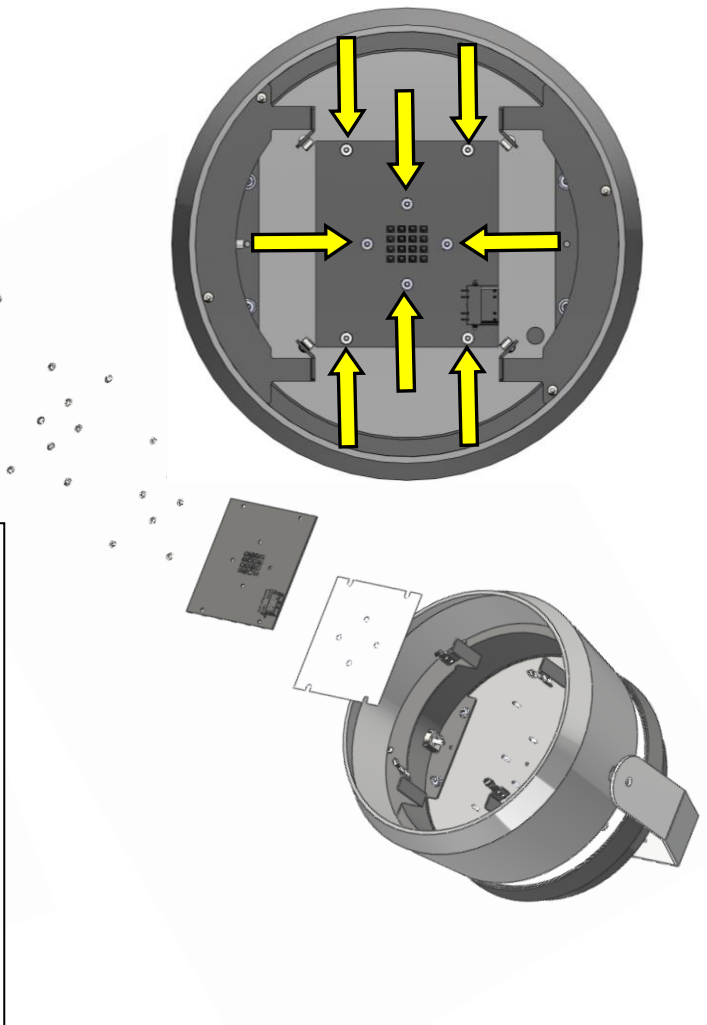


Figure 24. UV90 LED board replacement

Replacing the LED Drivers

STEP	ACTION
1	Remove all power to the fixture, and let the LED board cool. Remove the fixture from its current location. Set on a clean firm work-surface with the LED board facing up. Remove accessory hold and reflector, refer to page 5 & 6. WARNING: LED Module and fixture may be hot.
2	Remove the driver cover by unscrewing the 2 hex nuts securing it to the fixture (Fig. 25/26). Save all hardware (nuts, washers, and lock-washers) in a safe place for reinstallation.
3	Carefully separate the front half of fixture (YOKE SIDE) away from the driver housing. Turn the fixture upside down (LED facing down).
4	Disconnect the Line-Voltage and Low-Voltage connectors of the driver. Unscrew the driver from the mounting plate.
5	Place new driver on mounting plate and secure with the original screws. Reconnect the Line-Voltage and Low-Voltage connections. See driver label for specific wiring instructions.
6	Carefully lift the front half of fixture (YOKE SIDE) up and flip to have the LED's facing up. Position the fixture over the driver housing and align the two threaded mounting studs with the two holes in the driver plate. Reinstall the nuts, lock-washers and washers to secure the driver housing.
7	Reinstall the fixture and restore all power to the fixture. WARNING: Do not look directly at the lit LED.

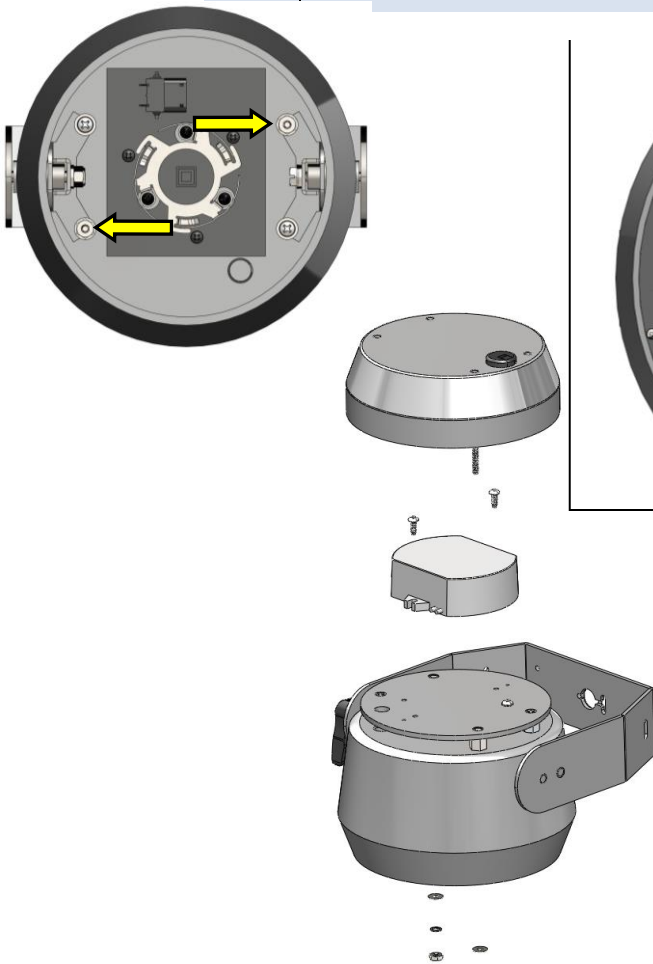


Figure 25. UV8 LED driver replacement

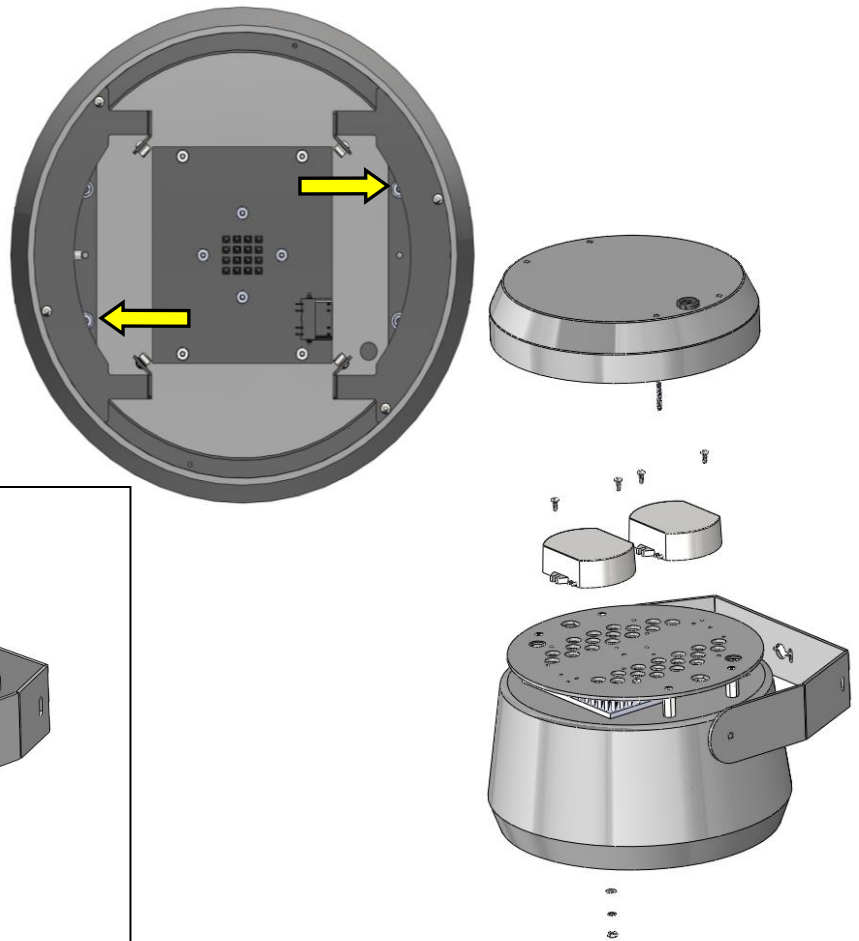


Figure 26. UV90 LED driver replacement

OPTIONAL DMX CONTROL The UV8 and UV90 are available with DMX/RDM control via 5 pin XLR connectors. The controller can be set to two different modes, DMX and Standalone.

DMX MODE

- The fixture is controlled by the data it receives on the 5 pin XLR connectors located on the side of the yoke. (**Fig. 27 & 28**). When DMX signal is lost/not present light output will default to 100%.

NOTE: Two DMX universes can be passed thru the XLR connectors but the fixture will only listen to data on pins 2/3 (**Fig. 29**).

PIN	Description
1	Common (shield)
2	Data -
3	Data +
4	Pass thru
5	Pass thru

- 1 DMX channel is used for 8 bit dimming. The microprocessor controller converts data to 10 bit dimming by a smoothing algorithm. Dim curve is linear.
- DMX address is set by a 3 digit push button. Numbers 001-512 will set the DMX address (**Fig. 30**).

NOTE: Top button decreases the value of the digit in that column by one. Bottom button increases the value of the digit in that column by one.

- If RDM (Remote Device Management) is needed set number to 000 (**Fig. 30**). Use a DMX/RDM interface (by others) to configure the fixture's DMX address.

STANDALONE MODE

- In standalone mode the fixture can be controlled directly from the 3 digit push button without the need of a DMX control device.
- Fixture is controlled from 0-100% intensity by setting the 3 digit push button from 900-999. 900 being 0% (off) and 999 being 100% (full on) (**Fig. 30**).

NOTE: Top button decreases the value of the digit in that column by one. Bottom button increases the value of the digit in that column by one.



Figure 27. DMX controller on yoke



Figure 28. DMX controller housing

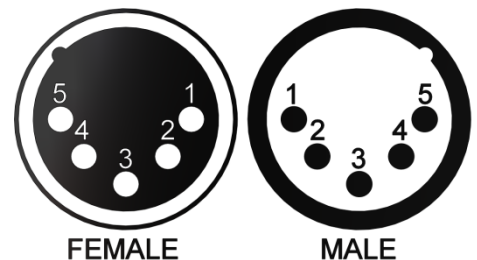


Figure 29. XLR 5 pin layout



Figure 30. DMX address, 3 digit push button