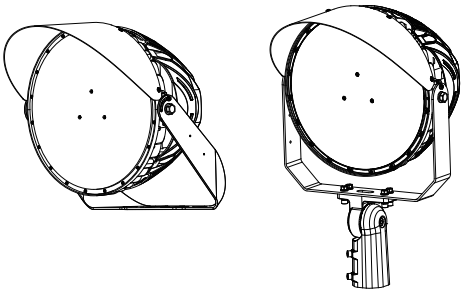


LED Sports Lighting Installation Manual

This manual applies to the following:
300W, 400W, 500W Selected

- Product Features:**
- The material of heat sink is high thermal conductivity Die-casting aluminum, good for heat dissipation and the surface is anti-static.
 - The unique design of the housing helps to speed up the heat dissipation, further ensuring the life of the fixture.
 - The integrated design of appearance makes the fixture look elegant.
 - This fixture is waterproof, dustproof, and anti-corrosive



300W, 400W, 500W Selected

SAFETY INSTRUCTIONS

Read and understand this entire manual before attempting to assemble, operate, or install the LED Luminaire. If you have any questions about the product, please consult your local supplier.

1. All electrical work must conform to the National Electric Code (NEC) and all applicable local codes and ordinances.
2. Only qualified personnel shall install and maintain the luminaires. Recommend that a licensed electrician install and maintain the luminaire. Verify the safety of existing power distribution system before beginning installation.

FAILURE TO FOLLOW OPERATING INSTRUCTIONS MAY LEAD TO DEATH, SEVERE INJURY, OR PROPERTY DAMAGE.

⚠ WARNING

Turn off power before performing any electrical or control work. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO DEATH, SEVERE INJURY, OR PROPERTY DAMAGE.

DO NOT make or alter any open holes in the luminaire. Do not modify the luminaire.

⚠ WARNING

Follow all applicable safety procedures and use Personal Protective Equipment such as hardhats, safety glasses, reflective vests, electrical safety gloves, fall protection equipment and safety toe boots during the installation, operation, and maintenance of the luminaire. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO DEATH, SEVERE INJURY, OR PROPERTY DAMAGE.

⚠ WARNING

Risk of eye injury! Eye protection is required at all times during the installation, operation, and maintenance of the luminaire. The high intensity light produced by the luminaire can cause severe damage to the eye if viewed directly at close range. Avoid being in front of a luminaire that is on or wear suitable light blocking protective eyewear such as welding goggles.

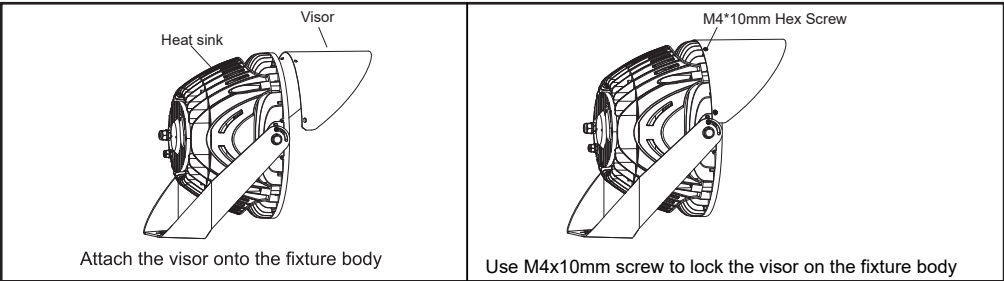
Store luminaires in a clean, dry place, protected from dirt, water, and sunlight. See table for required storage and operating conditions:

Storage Temperature	Operating Temperature	Humidity
40°F to 167°F	-20°~131°F	5% to 95% non-condensing

WARNING:

Please read the manual carefully before installation. Power off before installation. Please authorize only a qualified person or professional engineer to install the fixture. Before installation, please check if the local voltage range corresponds with working voltage of the fixture. If the fixture is damaged, it should be replaced by the supplier, a service agent or a qualified person. Please keep the fixture away from fire, electric shock, and/or vibration.

Step 1: Attach the Visor



Step 2: Install Slip-fitter bracket

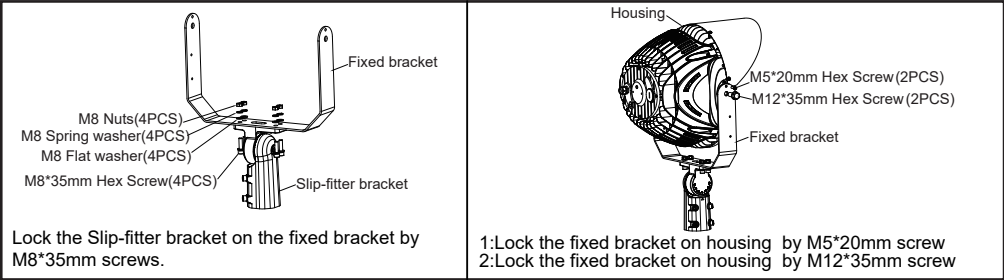


Figure 1. Visor Attachment

Step 2: Mount the Luminaires

1. Insert M20 bolts and plain washers onto bracket
2. Align rotatable bracket with mounting structure
3. Secure bracket, bolts, plain & lock washers with mounting structure
4. Tighten the nuts hand tight so mounting structure is secure but do not fully torque nuts until desired aiming is achieved

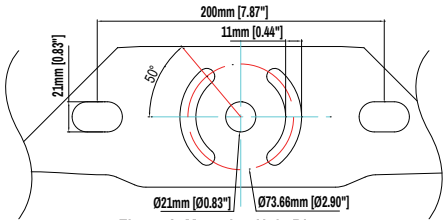


Figure 2. Mounting Hole Diagram

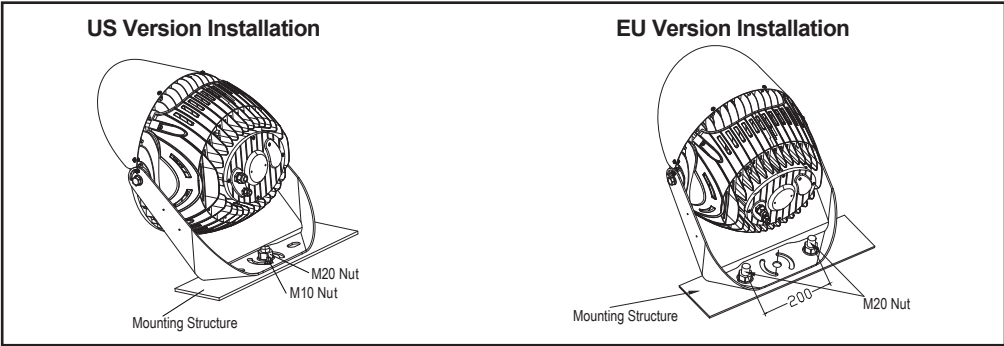


Figure 3. Standard Mounting

Step 3: Aim the Luminaires

Aiming the luminaire is a critical part of the led lighting solution to ensure that light is evenly distributed on the playing surface. There are two basic methods to properly aim a sports venue - Precision Laser Aiming by Coordinated, and Orient-Tilt.

Orient-Tilt

This technique involved turning the luminaire to predetermined angles before the lighting pole is lifted up and set in place. The Orient angle refers to the direction the luminaire faces in the Z-plane. Mount the luminaire to the structure but leave the mounting nut slightly loose to allow spinning flexibility about the mounting bolt.

Tilt angle refers to the direction the luminaire faces in the Y-plane. When the luminaire is securely mounted to the structure so that the mounting bracket does not move but the side Hex and Set screws are loosened, the fixture may rotate up inside the mounting bracket. Set the luminaire Tilt angle by rotating the fixture relative to the luminaire mounting structure.

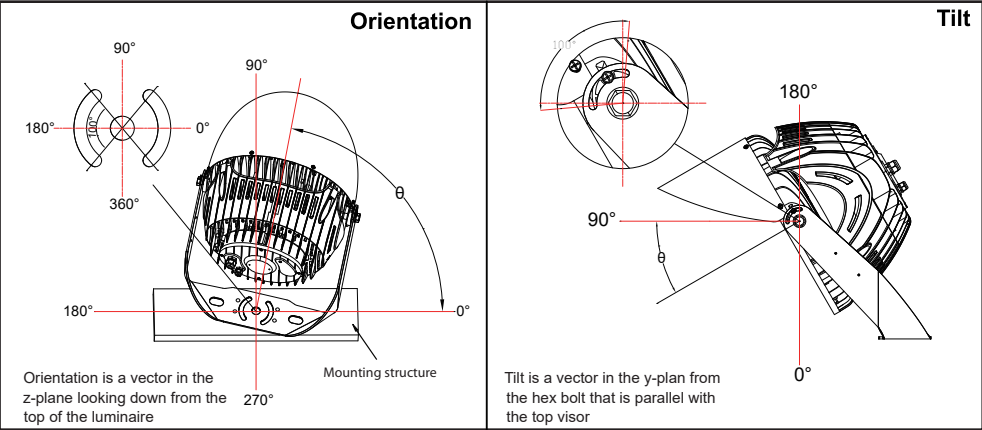


Figure 4. Orient and tilt

Electrical Load

System Wattle (W)	Current (A)					
	120V	208V	240V	277V	347V	480V
300	2.75	1.59	1.38	1.19	0.95	0.69
400	3.67	2.12	1.83	1.59	1.27	0.92
500	4.58	2.64	2.29	1.99	1.59	1.15

EPA Rating Information (ft²)

Wattle (W)	Front	Side	Top
300/400/500	1.28	0.85	1.36

Alternative Installation

(Applicable only to 300/400/500W models)

1. Attach the fixture on the slipfitter to the pole
2. Tighten the screw to secure the fixture to the base
3. Adjust the fixture accordingly to the desired angles
4. Tighten the screw on the slipfitter to lock in position

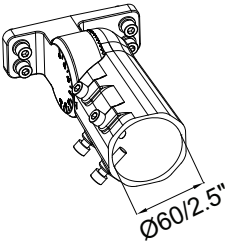


Figure 5. Slipfitter

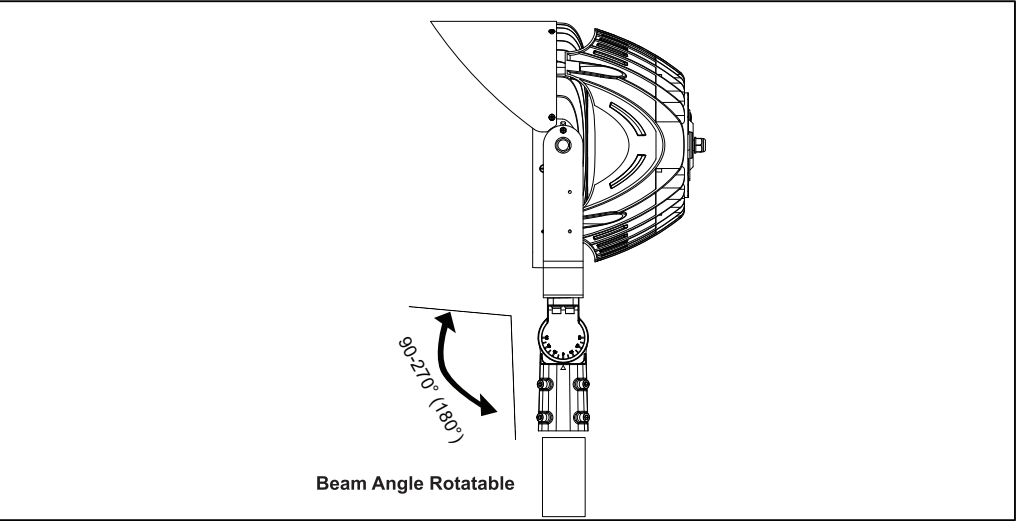


Figure 6. Pole Mounting

Power Wiring Connections

⚠ WARNING

Always turn power to fixture OFF before performing any work on control wiring. Turn transmitters off before working on main control lines. Performing any work on control connections while fixtures are receiving the signal may result in transient or fluttering control signals which can cause damage to the luminaire. FAILURE TO FOLLOW THIS WARNING MAY LEAD TO LUMINAIRE INTERNAL DAMAGE AND FAILURE.

■ Wiring Diagram

EU	US		label
Brown	Black	-- L --	L L
Blue	White	-- N --	N N
Yellow/Green	Green		⊕ GND ⊕ GND
Brown	Purple	-- DIM (+) --	
Blue	Pink	-- DIM (-) --	0-10V

Figure 7. Wiring Connections

Fasten safety cable

safety cable can be ordered separately as an accessory.

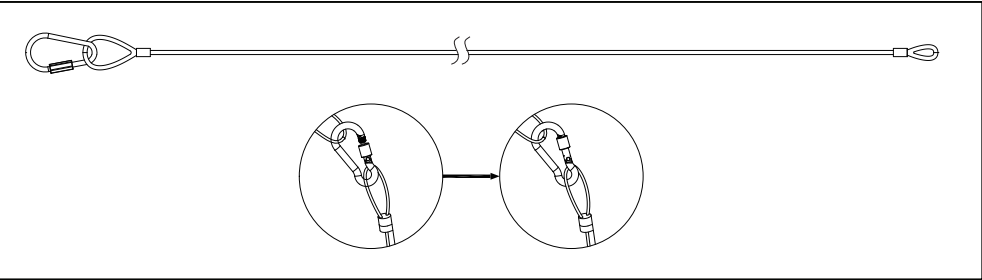


Figure 8. safety cable

⚠ WARNING

1. No sharp edges on the interface (bracket or hole) of mounting side.
- 2 The safety chain must be replaced immediately if any of the below scenarios occur:
 - a. The safety chain was stretched at any time due to luminaire falling;
 - b. Part of steel wire is broken or frayed;
 - c. The safety chain is designed to protect the luminaire from falling, but the luminaire should not be suspended for a long time.

For installations over 3m height:
secondary tA safety system application is mandatory, which is appropriated for the luminaire load.
(e.g. safety cable)

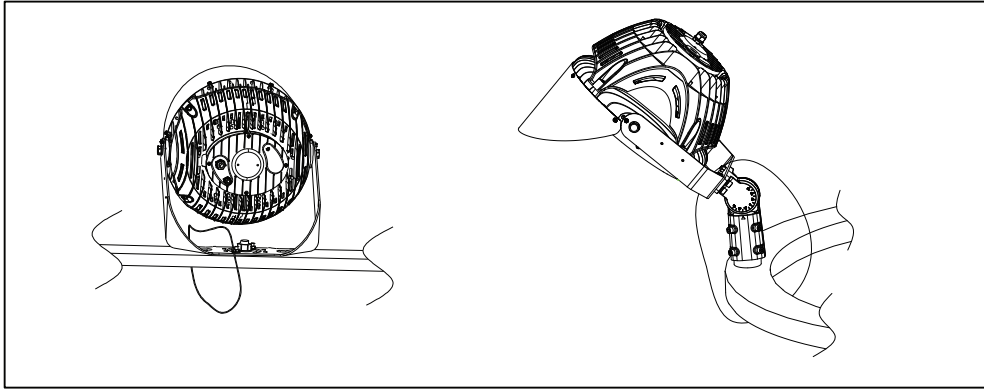


Figure 9. safety cable Installation

Laser Aiming

Precision Laser Aiming by Coordinates:

Laser aiming is the most effective and preferred technique for aiming sports lighting. This method uses a laser mounted to the luminaire to point the fixture at a predetermined point on the playing surface using (X,Y) co-l ordinates. Unless otherwise noted, aiming coordinates on photometrics or project installation drawings are based on the origin (0,0,0) placed at center field, court, or ice. All dimensions from that point are in feet along the playing surface unless otherwise noted.

⚠ WARNING

NEVER point the aiming laser at any person or animal as it can cause permanent damage to eyes. Use laser only for floor aiming fixtures as directed. **FAILURE TO FOLLOW THIS WARNING MAY LEAD TO SEVERE INJURY.**

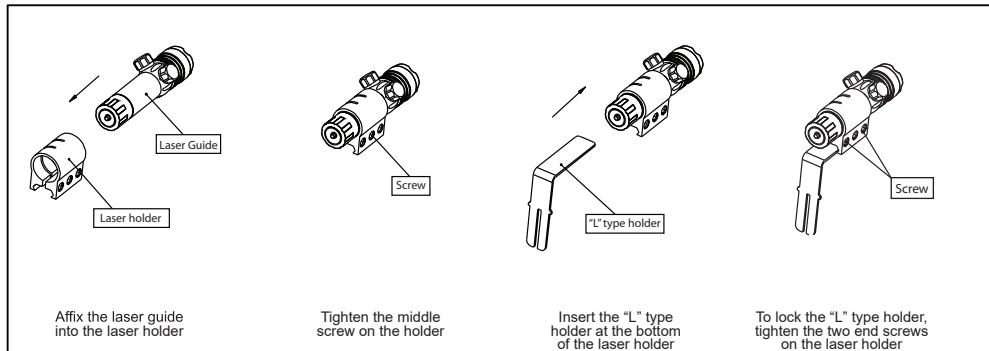


Figure 8. Laser Components

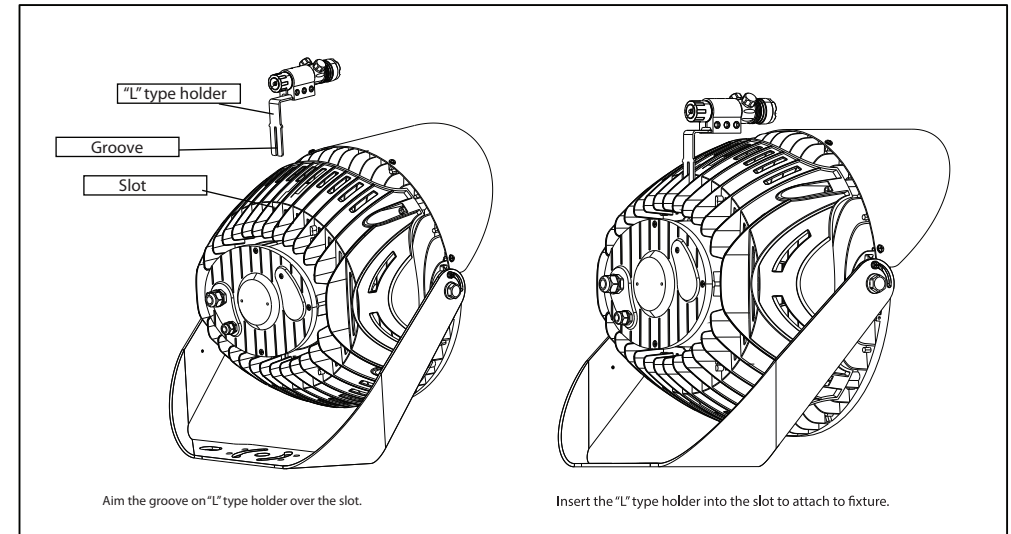










Figure 9. Laser Installation

Accessories Per Unit

Mounting Type	Accessory	Specifications	Quantity	
			US	EU
	Hex Head Screws	3/4-10 Thread length 2-3/4 Stainless Steel 304	1	2
	Plain Washers	M20	2	4
	Spring washer	M20	2	4
	Nuts	3/4-10	1	2
	Hex Head Screws	3/8-16 Thread length 2-3/4 Stainless Steel 304	1	/
	Plain Washers	M16	2	/
	Spring washer	M16	2	/
	Nuts	3/8-16	1	/



Screws and washers are not included in the package!

Wattage selectable instruction

3-IN-1 POWER ADJUSTABLE
Wattage Tunable:
S: 300W-400W-500W



Maintenance & Preventative Maintenance

Fixture Care and Maintenance

All luminaires are prepared with a powder-coated finish. The finish on exterior luminaires may weather over time, depending on the environmental conditions at the installation site. Proper care of the luminaires will maintain their performance and appearance.

Follow a regular maintenance schedule to retain optimal light output and thermal performance. Lack of preventative maintenance may disqualify owner from warranty. Not adhering to this minimum system cleaning requirement is considered negligence as outlined in your product warranty documents. Refer to your product and/or labor warranty documentation for further details.

Problem	Remedy
Luminaire does not power on	<ul style="list-style-type: none">• Verify the power supply is on, at the proper voltage, and stable.• Check connections at the source and at the fixture.• Verify control signal is above 50%.
Luminaire does not respond to controls	<ul style="list-style-type: none">• Reset the fixture by turning all power sources off for at least 10 seconds.• Inspect all system control wiring to make sure there are no poor connections or breaks in the control wiring.

Cleaning

1. Clean all luminaires at a minimum of once every 12 months from receipt of your product.
2. Remove physical elements such as dirt, leaves and other foreign debris from the luminaire housing that can block and modify the air cooling (heatsink fins)
3. Wipe the optical lenses with a clean, dry, cotton cloth to remove dust and other contaminants. A non-abrasive optical cleanser or water may be used periodically.
4. Do not apply cleaners in direct sunlight or at elevated temperatures.



WARNING

Inspection of Hardware

Inspect mounting system and products at least once every 12 months. Replace all rusted hardware elements.



Troubleshooting

If the system appears to not be operating correctly, perform the following steps:

Gather Data

The first step is always to find out as much about the issue as possible. Ask the following questions:

1. **How many fixtures are not operating correctly?** If only one fixture is not responding, continue investigating at that fixture itself. If a group of fixtures are not responding correctly, start at the source of the power or controls for that group.
2. **Have any obvious external forces been in the area?** For instance, were any riggers, electricians, or other workers near the fixtures or controls? Have there been any power disturbances in the facility such as lightning storms?
3. **Are your fixtures responding according to the input control function?** Run the system through some different control scenes, including all on and then all off (blackout mode). Take note of any fixtures not responding correctly to the scenes.

Fixture Replacement

Contacting Warranty Technical Support

1. Before you call, make sure you have completed the troubleshooting steps.
2. Gather as much detailed information as possible about the situation.
3. Have your fixture and project information handy, including the model number of the fixture in question.

Refer to your fixture warranty document for more information.

If you have attic stock fixtures available and need to replace a fixture, simply follow the installation instructions in this manual to replace the fixture in question. Be sure to address the replacement fixture with the correct luminaire number.

All Luminaires, materials, and accessory equipment being returned through the warranty process need to be placed back in their original packaging in the same orientation that they were originally shipped from the factory. If the packaging is damaged or if there are questions on the orientation in returning equipment and materials, you need to contact the Warranty Department for replacement packaging materials.