



# 630W



# USER MANUAL

**DE CMH FIXTURE MODEL 630W**

**120V/240V, 277V, 347V**

IL-CMHDE630-120  
IL-CMHDE630-277  
IL-CMHDE630-347

877-540-5588  
iluminarlighting.com  
sales@iluminarlighting.com

**THANK YOU** for purchasing an **ILUMINAR Lighting CMH FIXTURE**. We strive to deliver the best customer service alongside world-class products and we go above and beyond to make sure you are satisfied with your purchase. The following is a general set of warnings and basic guidelines for the ILUMINAR CMH DE Fixture. Always have an expert install your product(s).

**KEEP ORIGINAL PACKAGING**

In the event of a return, products will need to be in the original ILUMINAR packaging to avoid product damage during shipping. Any damage to products not in their original packaging will not be covered under the Warranty. Visit [iluminarlighting.com/warranty](http://iluminarlighting.com/warranty) for more detailed information.

**SAFETY 1ST**

**FAILURE TO OBSERVE THE FOLLOWING WARNINGS COULD RESULT IN ELECTRICAL SHOCK AND SERIOUS INJURY.** Additionally, failure to follow these safety warnings can/will result in a void of all warranties as well as any manufacturer liability.

Please read carefully prior to beginning installation.

**WARNINGS**

- ❗ Make sure the power cord is correctly connected and the lamp is securely in place.
- ❗ Disconnect the fixture from the power supply prior moving the unit or performing any maintenance or lamp changes.
- ❗ DO NOT open the ballast case, it will void the warranty.
- ❗ DO NOT support the ballast by power cord(s). These cords/connections are not designed to bear weight.
- ❗ DO NOT make contact with the interior of the socket while power is on.
- ❗ DO NOT attempt to rewire, alter, modify or reconfigure your system - this will void the ILUMINAR warranty and could create serious safety hazards, or cause bodily injury or death, as this is a high amperage and voltage device.
- ❗ DO NOT submerge in water.
- ❗ DO NOT plug the system into untested or unidentified voltage other than what is designated on ballast.
- ❗ DO NOT CONNECT A CMH BALLAST to a Flip Box. It will void the warranty and can cause electrical failure within the CMH Ballast. Flip or Switch Boxes are not recommended for any CMH Units or for any high wattage ballasts.
- ❗ DO NOT plug or unplug the lamp cord while the ballast is connected to power.
- ❗ Make sure to wear proper gloves to protect from the transfer of oil from the skin to the lamps glass surface.
- ❗ When changing out the lamp, make sure that the lamp has time to cool before touching.
- ❗ Make sure the lamp is correctly locked into the socket, properly securing the lamp.
- ❗ If the lamp is damaged in any way (cracked, loose internal connections) replace the lamp immediately.
- ❗ Keep away from Children. This product contains delicate electronic components. If it is placed near an object that transmits radio signals, it could cause interference (i.e.: mobile devices, walkie talkies, CB radios, remote controls and microwaves). If interference occurs, move such objects away from the appliance.



**630W**  
DE FIXTURE

- ◀ Energy efficient
- ◀ Uniform Light Distribution
- ◀ Soft Start Technology
- ◀ Ignition Failure Protection

SPECIFICATIONS	120V	240V	277V	347V
Input Current	5.56A	2.79A	2.4A	1.92A
Input Power	675W	675W	675W	343W
Rated Voltage	120V	240V	277V	347V
Voltage Range	108-264V		249-305V	312-382V
Operation Frequency	140-220Hz			
Frequency	50 - 60Hz			
THD	<15%			
Dimmable	0-10V Controllable			
Min Power Factor	0.95			
Crest Factor	<1.7			
Input Connection	IP67 Wieland Plug			
BTU Output	2,770 btu			
Relative Humidity	95% (Non-condensing)			
Operation Temp.	0 - 35°C / 32-95°F			
Socket Type	K12x30s - / Style			
Minimum Mounting Height	1.2m / 4'			

Recommended to use with ILUMINAR Touch+ or ILUMINAR HASH Controller. Lamp Not Included.

**PHYSICAL SPECIFICATIONS**

	120/240V	277/347V
Case Length	318mm / 12.52"	318mm / 12.52"
Case Width	213mm / 8.39"	249.2mm / 9.81"
Height	597.9mm / 23.54"	597.9mm / 23.54"
Weight	6.6kg / 14.55lb	6.7kg / 14.77lb



iluminarlighting.com  
Toll Free: 1-877-540-5588

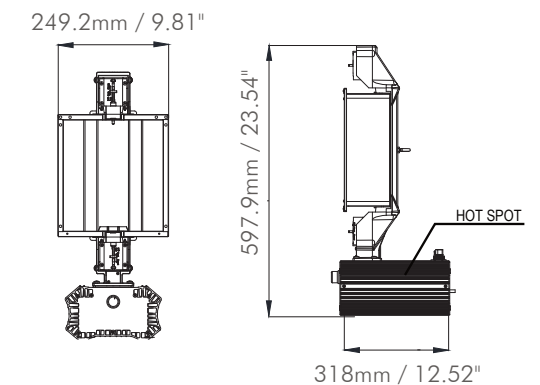
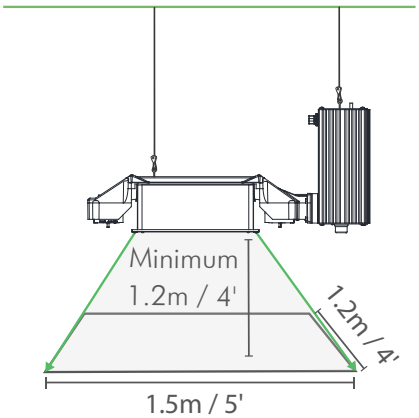


**CMH**

VOLTAGE:	SKU:
120V/240V	IL-CMHDE630-120
277V	IL-CMHDE630-277
347V	IL-CMHDE630-347



**MOUNTING & COVERAGE**



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**INSTALLATION PROCEDURE**

**PLEASE READ CAREFULLY PRIOR TO INSTALLATION**

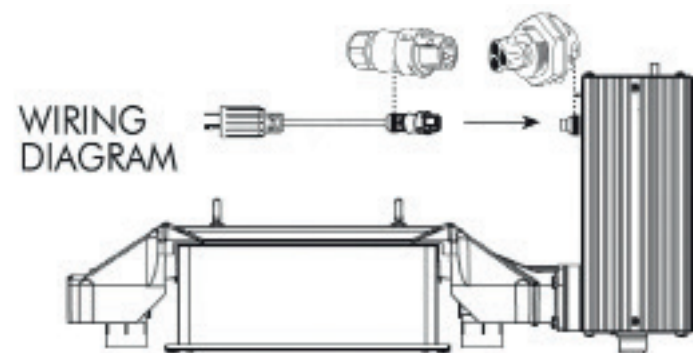
When possible, have a licensed electrician or electrical expert install all fixtures or aid in the electrical layout plans and/or diagrams prior to installation.

Check the electrical panel to ensure proper voltage is available for the number of fixtures installed. Panels should only support a total amperage of 80% of its capacity. (100 amp panel should never exceed 80 amps).

1. Find a suitable location for the fixture with sufficient cooling and away from heat sources.
2. Use the included hanging cables to hang the fixture.
3. Ensure the fixture is hung completely level to the ground. A fixture that is not level can burn the lamp emitter incorrectly leading to shorter lamp life, poor lamp performance and/or lamp failures.
4. Install the lamp into the roll-lock socket (instructions pages 6-7) using soft cotton or surgical gloves.
5. Plug the power cord into the power source (electrical outlet).
6. For proper lamp break-in, we recommend that you run the fixture at 100% power for at least 100 straight hours after initial startup. This will improve lamp life and performance.
7. Set your desired dimming ratio. NOTE: the ballast dims or raises output gradually to protect the lamp, so you may not see an instant increase upon changing your output percentage.

**PERFORMANCE REQUIREMENTS**

RATED VOLTAGE	120V	240V	277V	347V
VOLTAGE RANGE +/- 10%	108-264V		249-305V	312-382V
FREQUENCY	50/60 Hz			
OPERATIONS FREQUENCY	140 - 220Hz			



**DIMMING**

- Turn the dimming dial to cycle through the dimming levels.
- If your lamp fails to start immediately, DO NOT cycle the power on and off. This can damage the lamp and ballast.
- If after 30 minutes your lamp is still not lit, shut off power to the ballast, and reconnect.
- This will begin the startup sequence again.
- Until the lamp has achieved at least 100 hours of operation, the lamp should never be turned off prior to running at least 15 minutes. In case this happens, WAIT 1 hour before igniting the lamp again.

**HOT RESTRIKE**

**IT IS VERY IMPORTANT** that the lamp is given adequate time to cool down before it is reignited. Allow a hot lamp to cool for 1 hour before you try to restrike it. Hot re-strikes cause permanent lamp failure and lumen output degradations. The lamp should never be turned off before the lamp reaches full intensity, this may shorten its lifespan.

**MOUNTING LOCATION**

**DO NOT** install fixtures in areas of high heat, such as an attic, tent or closed closet. Mount units at least 24-60 inches apart.

**BALLAST PROTECTIONS**

1. End of Lamp Life (EOL) Protection
2. Short Circuit Protection
3. Open Circuit Protection
4. Ignition Failure Protection
5. Thermal Protection
6. Suitable for ILUMINAR Touch Controller
7. Suitable for HASH Controller / 0-10V Control
8. Total Control Range 50-115%

**PHYSICAL SPECIFIC**

MODEL	120/240V		277/347V	
CASE LENGTH	318mm	12.52"	318mm	12.52"
CASE WIDTH	213mm	8.39"	249.2mm	9.81"
HEIGHT	597.9mm	23.54"	597.9mm	23.54"
WEIGHT	6.6kg	14.55 lbs	6.7kg	14.77 lbs

**CARE**

1. Max. allowable case temperature: 35° C / 95° F
2. Ambient Temperature: 0 - 35°C / 32-95°F
3. Max. Humidity: 95%
4. Ignition Voltage: 5kV

**COMPATIBILITY**

Compatible with all ILUMINAR CMH DE lamps as well as the ILUMINAR Touch & ILUMINAR HASH Environment controllers.



## PROPRIETARY ROLL LOCK SOCKET (ILUMINAR FIXTURES)

ILUMINAR Lighting created the first of its kind, single-handed "Roll-Lock" socket for simple, one-handed lamp installation. We know it can get tricky to load new lamps - it's too easy to drop the lamp and lose that investment. Keep your lamps safe when you install using the Roll Lock socket. The Roll Lock Socket works with all DE Lamps - HPS, MH, and CMH, for all wattage options.

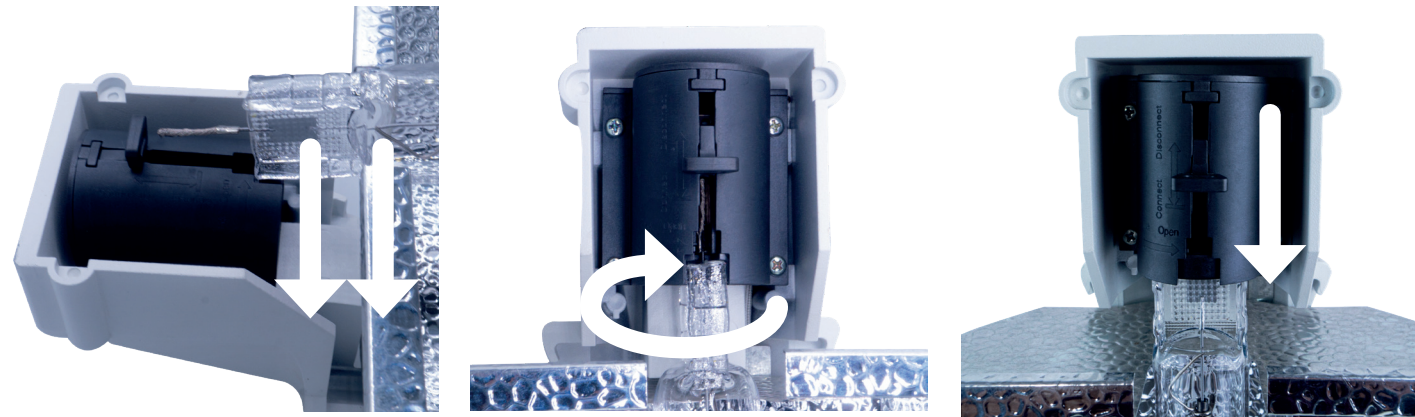
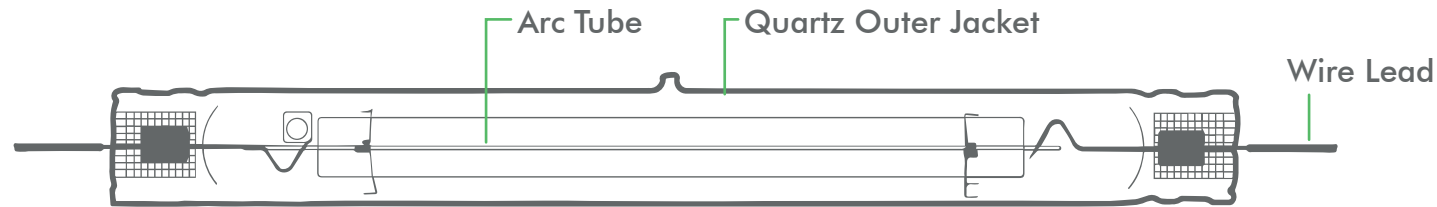


Photo A

Photo B

Photo C

### ROLL LOCK SOCKET INSTALLATION

1. Slide both levers away from the lamp to the "Open" position. (Photo A) Each socket applies up to 5mm of lateral pressure to ensure a secure fit.
2. Ensure both wire ends/leads are straight - **DO NOT BEND THE WIRE LEADS!** Ensure the wire leads are **NOT FRAYED OR LOOSE** (if there are frays, twist them back into the wire leads). Small frays of metal can cause the fixture to arc or melt.

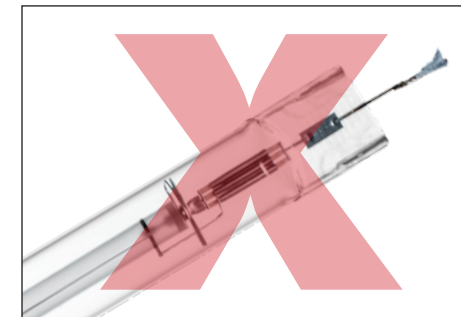
#### CAUTION: DO NOT HANDLE THE LAMP WITH BARE HANDS

The oils from your hands can be dangerous when burning off in the high heat of the lamp.

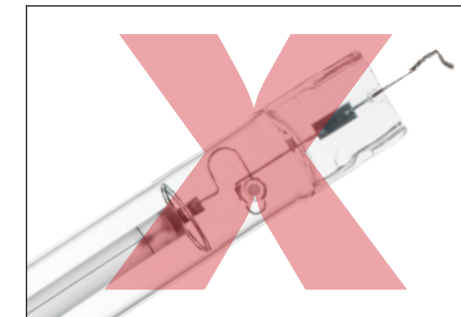
### ROLL LOCK SOCKET INSTALLATION (CONT.)

3. Using soft gloves to handle the lamp, slide the lamp into the fixture (with metal leads straight) until the lamp is fully seated.
4. Rotate the bulb, itself, to lock it into place (so that it will not move).
5. Slide both socket levers toward the lamp to the "closed" position to add a second lock to fix the lamp into position. If the lamp is seated correctly, both levers should easily slide inward to lock the DE lamp into the socket. It is now ready to use.

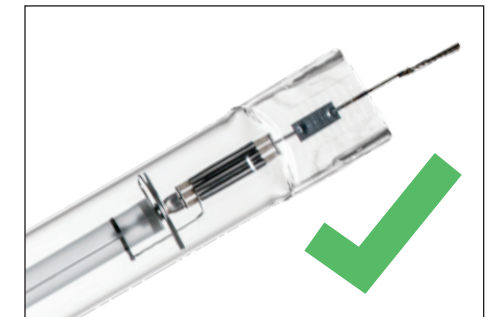
**DO NOT** force the levers closed, this can cause damage to both the lamp and the levers. **DO NOT** handle the lamp with bare hands. Always wear surgical or cloth gloves when handling the lamp to minimize fingerprints and oils left on the lamp. If the lamp needs cleaning after installation, use a soft, dry cotton cloth to wipe off fingerprints/skin oils.



DO NOT FRAY



DO NOT BEND



### ROLL LOCK SOCKET UNINSTALL

1. To remove or change the lamp, simply follow the steps above.
2. Slide both socket levers away from the lamp to the "Open" position. (Photo A)
3. **USING SURGICAL OR COTTON GLOVES**, gently rotate the lamp itself to open the Roll Lock Socket.
4. Gently lift the lamp out of the sockets.
5. Rotate the new bulb into place.
6. Slide both socket levers toward the lamp to the "closed" position.

### WATCH ROLL LOCK VIDEO GUIDE



# TROUBLESHOOTING

Follow these troubleshooting solutions:

## Possible Cause

## Corrective Maintenance

Lamp Loose in Socket	Ensure the lamp is fully inserted into the socket and that it has been properly locked.
Incorrect Voltage	Make sure you're using the correct input voltage with ballast. If using incorrect voltage, disconnect the ballast from the power source immediately.
Defective or Improper Wiring	Examine wiring to ensure it agrees with wiring diagrams on ballast label. Check connections to see that they are secure. If wiring a ballast, DO NOT use a neutral. The correct wiring is two hot wires and a ground.
Poor electrical connections	Check wiring and lamp contact with socket.
Incorrect Lamp	Verify that you're using a correct wattage lamp.
Lamp Damage	Investigate possibility of outer lamp damage. Look for broken tubes or loose metal replace lamp.

## RETURNS

## WARRANTY

Please contact your point of purchase store for returns.

When properly used, this unit will provide you with years of service. The ballast is covered under a 3 year warranty and the lamp has a 1 year warranty. This warranty will be voided if the unit is misused, abused, opened or altered. Warranty repair or replacement will be at the sole discretion of the manufacturer. Defective units need to be returned to the place of purchase with proof of purchase/receipt.

For more warranty information, visit [iluminarlighting.com/warranty](http://iluminarlighting.com/warranty)

## CERTIFICATIONS



**This guide does not supersede national, state, or local regulations for electrical installations.**