

Chroma-Q[®] Inspire MD

User Manual



Chroma-Q[®]
BRILLIANT SOLUTIONS

Part Number: CHINHLMD, CHINHLMDW
(Model: 632-3020, 632-3030)
North American version 120V 60Hz only

Software Version (Engine) F
Manual: 632-0719, V1.1 Jul. 2019

Warranty Statement



Chroma-Q warrants to the original purchaser, with proof of purchase, that its delivered products shall be free from defects in material and workmanship under normal use for a period of 36 months from date of shipment.

Chroma-Q will repair, or at its option, provide an equivalent item or replace, the defective product during the stated warranty period. This warranty applies only to the repair or replacement of the product and only when the product is properly handled, installed and maintained according to Chroma-Q instructions. This warranty excludes defects resulting from improper handling, storage, installation, acts of God, fire, vandalism or civil disturbances. Purchaser must notify Chroma-Q in writing within 14 days of noticing the defect. This warranty excludes field labour or service charges related to the repair or replacement of the product.

The warranty contained herein shall not extend to any finished goods or spare parts from which any serial number has been removed or which have been damaged or rendered defective (a) as a result of normal wear and tear, wilful or accidental damage, negligence, misuse or abuse; (b) due to water or moisture, lightning, windstorm, abnormal voltage, harmonic distortion, dust, dirt, corrosion or other external causes; (c) by operation outside the specifications contained in the user documentation; (d) by the use of spare parts not manufactured or sold by Chroma-Q or by the connection or integration of other equipment or software not approved by Chroma-Q unless the Customer provides acceptable proof to Chroma-Q that the defect or damage was not caused by the above; (e) by modification, repair or service by anyone other than Chroma-Q, who has not applied for and been approved by Chroma-Q to do such modification, repair or service unless the Customer provides acceptable proof to Chroma-Q that the defect or damage was not caused by the above; (f) due to procedures, deviating from procedures specified by Chroma-Q or (g) due to failure to store, install, test, commission, maintain, operate or use finished goods and spare parts in a safe and reasonable manner and in accordance with Chroma-Q's instructions (h) by repair or replacement of engines without factory training.

The warranty contained herein shall not apply to finished goods or spare parts which are sold "as is", as "second-hand", as used", as "demo" or under similar qualifications or to Consumables ("Consumables" is defined as any part(s) of goods or part(s) for use with goods, which part(s) of goods or part(s) for use with goods are consumed during the operation of the goods and which part(s) of goods or part(s) for use with goods require replacement from time to time by a user such as, but not limited to, light bulbs).

The warranty contained herein shall not apply, unless the total purchase price for the defective finished goods or spare parts has been paid by the due date for payment.

The warranty contained herein applies only to the original purchaser and are not assignable or transferable to any subsequent purchaser or end-user.

This warranty is subject to the shipment of the goods, within the warranty period, to the Chroma-Q warranty returns department, by the purchaser, at the purchaser's expense. If no fault is found, Chroma-Q will charge the purchaser for the subsequent return of the goods.

Chroma-Q reserves the right to change the warranty period without prior notice and without incurring obligation and expressly disclaims all warranties not stated in this limited warranty.

Disclaimer

The information contained herein is offered in good faith and is believed to be accurate. However, because conditions and methods of use of our products are beyond our control, this information should not be used in substitution for customer's tests to ensure that Chroma-Q products are safe, effective, and fully satisfactory for the intended end use. Suggestions of use shall not be taken as inducements to infringe any patent. Chroma-Q sole warranty is that the product will meet the sales specifications in effect at the time of shipment. Your exclusive remedy for breach of such warranty is limited to refund of purchase price or replacement of any product shown to be other than as warranted.

Chroma-Q reserves the right to change or make alteration to devices and their functionality without notice due to our on going research and development.

The Chroma-Q Inspire range has been designed specifically for the lighting industry. Regular maintenance should be performed to ensure that the products perform well in the entertainment environment.

If you experience any difficulties with any Chroma-Q products please contact your selling dealer. If your selling dealer is unable to help please contact support@chroma-q.com. If the selling dealer is unable to satisfy your servicing needs, please contact the following, for full factory service:

Outside North America:	North America:
Tel: +44 (0)1494 446000	Tel: 416-255-9494
Fax: +44 (0)1494 461024	Fax: 416-255-3514
support@chroma-q.com	support@chroma-q.com

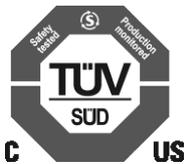
For further information please visit the Chroma-Q website at www.chroma-q.com.

Chroma-Q and Inspire are trademarks, for more information on this visit www.chroma-q.com/trademarks.

The rights and ownership of all trademarks are recognised.

Important Notice:

As per the requirements in the Occupational Safety and Health Administration standards for product approval, please refer to the OSHA web pages <http://www.osha.gov/dts/otpca/nrtl/> for information on the list of Nationally Recognized Testing Laboratories (NRTLs) and the scope of recognition.



Safety information



WARNING!

Read the safety precautions in this section before installing, powering, operating or servicing this product.



Warning!
Safety Hazard.
Risk of severe injury or death.



Warning!
Fire Hazard.



Warning!
Hazardous Voltage.
Risk of severe lethal electric shock.



Warning!
Refer to User manual.

Warning!

- Read the user manual before installing and operating the Chroma-Q Inspire MD. For future reference, keep and use the manual.
- Safety precautions given in user manual must be followed at all times and the manuals of all the devices you connect it to. Observe all the warnings printed on devices and in manuals. Make sure whoever is involved in working on or using the Inspire MD has carefully read and understood all the safety precautions and lasted warnings.
- Install, connect, operate and service devices only as described in this manual and in connected devices' manuals and only in accordance with local laws and regulations. All Chroma-Q manuals are supplied with devices and are also available for download from www.chroma-q.com.
- Inspire MD does not have user-serviceable parts. Refer any operation not described in this manual to support@chroma-q.com.

If you experience difficulties with any Chroma-Q products please contact your local dealer.

If your local dealer is unable to help then please contact support@chroma-q.com.

If you are having trouble finding what you are looking for on our website, then contact our Chroma-Q marketing department by sending an email to marketing@chroma-q.com.

PROTECTION FROM ELECTRIC SHOCK

- Use only the cables specified in this manual and on the Chroma-q website at www.chroma-q.com to interconnect devices in the installation. If the specified cables are not long enough for an intended cable run, consult Chroma-Q for assistance in finding or creating a safe alternative solution.
- Provide a means of locking out AC mains power that allows power to the installation to be shut down and made impossible to reapply, even accidentally, during work on the installation.
- Shut down power to the installation during service and when it is not in use.
- Before applying power to the installation, check that all power distribution equipment and cables are in perfect condition and rated for the current requirements of all connected devices.
- Isolate the installation from power immediately if any product, power cable or power plug is in any way damaged, defective or wet, or if it shows signs of overheating.
- Do not immerse an Inspire MD fixture in water or expose it to high-pressure water jets.

PROTECTION FROM BURNS AND FIRE

- The Inspire MD is cooled passively by natural air convection. Provide adequate clearance for airflow around the fixtures.
- Do not operate the Inspire MD if the ambient temperature (T_a) exceeds 40° C (104° F).
- Do not modify the Inspire MD in any way not described in this manual or install other than genuine Chroma-Q parts.
- Use only accessories approved by Chroma-Q.

PROTECTION FROM INJURY

- Ensure that the installation hardware and supporting surface or structure can hold at least 10 times the weight of all the devices they support.
- Block access below the work area and work from a stable platform whenever installing, servicing or moving the Inspire MD.
- As soon as work is completed, check that all hardware and components are securely fastened to supporting structures.
- Make sure there are no flammable materials close to the product during operation.
- Avoid direct eye exposure to the light source while the product is on.
- Never try to repair the product. Repairs carried out by unskilled people can lead to damage or malfunction. Please contact the nearest authorized dealer or contact support@chroma-q.com.



Keep this User Manual for future consultation. If this product is used by another user, be sure that they also receive this document.

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1. Product overview

The Chroma-Q™ Inspire™ MD LED house light is a powerful multi-purpose creative lighting tool that utilises some of the innovative core technologies found in other popular Chroma-Q fixtures. Inspire™ MD can be used directly on existing dimming system and does not require additional control system. Inspire™ MD provides beautiful warm white with its fully homogenized lens with a choice of three different beam angle. Inspire uses an energy-efficient compact LED design providing reduced maintenance and running costs.

Note: HANDHELD light METERS

Handheld Light Meters provide a limited measuring range for LED fixtures, which may result in inconsistent and unreliable measurements.

All photometric values listed in this document are based on testing and measurements conducted by certified independent laboratories with reference to the IES standards.

2. Operation

2.1. Unpacking the Units

The Inspire Terminal Strip package includes:

Table 1: Inspire Mains Dimmer package

ITEM	Description	Qty.	Model
1	Light Fixture	1	632-XXXX
2	Safety Chain	1	900-0649
3	Quick Start Guide	1	632-0720
5	Plug-in terminal block for AC power input	1	900-2214
6	Closing plate is included in the bag	1	632-0007

We recommend that you keep the original packaging in case the item needs to be returned

2.2. Powering up Inspire™ MD

To connect the wiring of the AC power input cable:

1. There is a Power Input Cover Plate provided with the fixture (Figure 1), and is not attached to the fixture. The Power Input Cover Plate must be mounted as described in the following steps.
2. **To avoid pressure on connector and faulty connection, the power cable should be soft like SJOW cable type. Avoid rigid electrical cables.**
3. Insert the power cable with the appropriate cable clamp/gland through the cover plate.
4. Unplug the Terminal Block Plug from the Header, Figure 2.
5. Strip the AC power wires as per, Figure 3.
6. Insert the AC power wires in the terminal block connector wire hole and fasten the screws. Screws must be hand tightened with the Ø1.8mm slotted screwdriver to within the specified torque, Figure 4.
7. Pull back on the wire to be sure it is secure and check there are no wire strands outside the terminal block.
8. Secure the cable clamp/ gland in the Ø18mm knockout hole.
9. Plug the wired Terminal Block Plug into the Terminal Block Header.
10. With the cable clamp/ gland unsecured, re-attach the cover plate with the screws provided in the package using a #1 Phillips screwdriver.
11. Tighten the cable clamp/ gland.

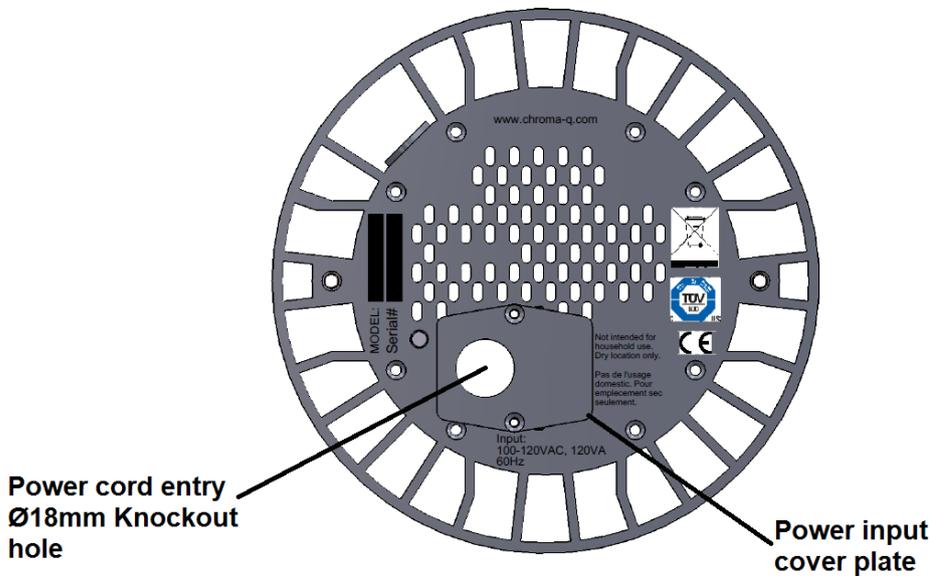


Figure 1: Bottom View of the fixture

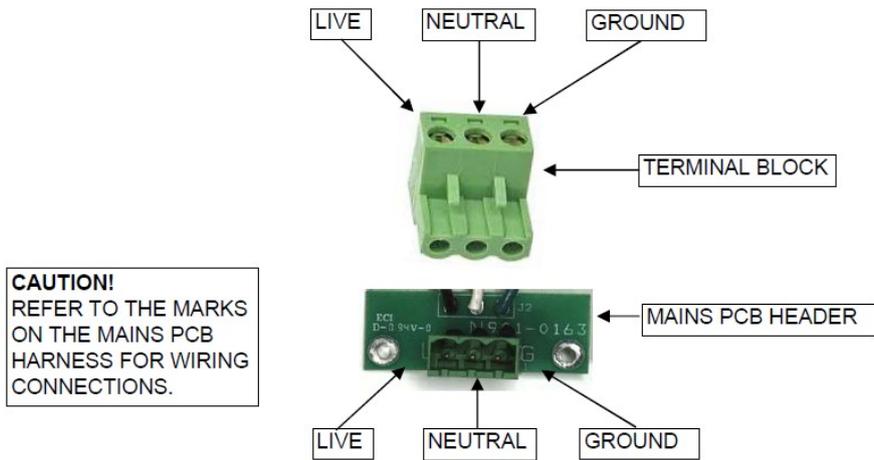


Figure 2: AC Power Cable Wiring

Table 1: Power Cable Colour Code

EU	North America	Connections	
Green and Yellow	Green	Earth (E)	Ground (Green)
Blue	White	Neutral (N)	Neutral (Silver)
Brown	Black	Live (L)	Hot (Gold)

Wire Strip Length

The wire must be stripped to the proper dimension to ensure correct insertion depth in the connector. Excessive conductor will be exposed if the strip length is too long and entrapment of the insulation or improper termination will result if the strip length is too short.

The wire must be inserted into the wire hole until the insulation is even with the housing at the wire hole opening. The screw must be hand tightened with the proper screwdriver to within the torque provided.

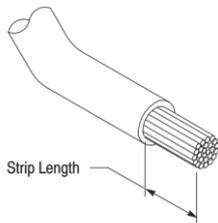


Figure 3

Wire strip length: 6 (mm)/ 0.2 inches.

Wire Range: .05 – 3 mm² [30 – 12 AWG]

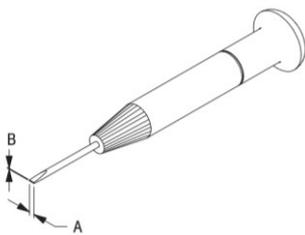


Figure 4

Suggested Screw Torque: 7.0 in.-lb/ 0.7909 Nm.

Pull back on the wire to be sure it is secure and check there are no wire strands outside the terminal block.

Screwdriver: Ø 1.8mm slotted screwdriver.

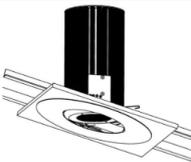
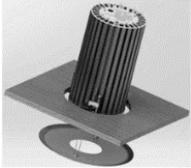
2.3. Mounting

The Inspire™ MD fixture is built with a mounting bracket for overhead hanging applications. The top of the mounting bracket has a 1/2" hole which will accommodate for M10 & M12 hardware.

Secure the fixture with a safety cable.

Other mounting options, such as a yoke, or recessing mounting kits are available.

Table 3: Optional Mounting Kits and Accessories

Picture	PART NUMBER: Description
	CHINSIK15B: Blind Sloped Ceiling Kit - 0 TO 15° Angle (Black Trim) CHINSIK15W: Blind Sloped Ceiling Kit - 0 TO 15° Angle (White Trim) CHINSIK30B: Blind Sloped Ceiling Kit - 20 TO 30° Angle (Black Trim) CHINSIK30W: Blind Sloped Ceiling Kit - 20 TO 30° Angle (White Trim)
	CQ632-9120: Inspire™ Blind Ceiling Mount Kit (Black Trim) CQ632-9121: Inspire™ Blind Ceiling Mount Kit (White Trim)
	CHINTHB: Inspire™ Top hat/Snoot (Black) CHINTHW: Inspire™ Top hat/Snoot (White)
	CHINBDB: Barndoor for Inspire™ (Black) CHINBDW: Barndoor for Inspire™ (White)
	CHINYK: Yoke Mount Kit for Inspire™ (Black) CHINYKW: Yoke Mount Kit for Inspire™ (White)

For further information, consult your local representative or please visit the Chroma-Q website at www.chroma-q.com support/ product download section for installation instructions and product support material download.

2.4. Optics

The Inspire™ MD fixture is factory shipped with a permanent 32° lens. Spreader lens kit is provided with the fixtures to achieve wider beam angles.

The holographic diffusion lens film is installed in between the permanent 32° lens and the bezel. Consult the quick start guide in the lens kit for more detailed lens installation instructions.

The light output beam angles are:

Table 4

Lens type	Beam angle
Narrow lens (factory installed)	~ 32°
Medium lens (holographic film)	~ 42°
Wide lens (holographic film)	~ 65°

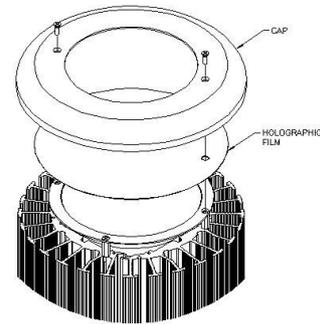


Figure 5

2.5. Control

The Inspire™ MD is attached to the mains source that is controlled by a phase cut dimmer. The output of a fixture is controlled by the output of existing dimmer system. The fixture needs to be energized before it can output any light, therefore the first 10% of a typical dimmer control channel will not cause the Inspire™ MD to emit light. From 10% to 100% of the control channel is equivalent to 0% to 100% of the Inspire™ MD light output.

2.6. Thermal Performance

The Inspire™ MD is cooled passively via natural convection. The fixture incorporates an automatic thermal protection that reduces the output when the internal temperature reaches the maximum limit due to extreme ambient conditions. Provide free airflow around the unit. Do not operate the unit in places where air circulation is blocked. During installation, provide a minimum of 5-inch/ 127mm space around the unit from building insulation materials.

2.7. Overvoltage protection

The fixture has in-built overvoltage protection ($\geq 150\text{VAC}$) and has a 2A fuse installed.

3. Troubleshooting

Troubleshooting is a process of elimination.

First, rule out the other field factors (i.e. bad connections, faulty cables and power supplies).

For technical support and/or parts, please contact your selling dealer.

Table 5

Symptom	Possible Cause	Solution
Low LED output.	<ul style="list-style-type: none">• Internal temperature of the fixture is over the limit.	<ul style="list-style-type: none">• Check area ventilation.
No LED output	<ul style="list-style-type: none">• Overvoltage protection fuse blown	<ul style="list-style-type: none">• Replace the fuse with same rating fuse (2A).

4. Specification

4.1. Technical Specifications

Spec	CHINHLMD (Black)	CHINHLMDW (White)
Net Dimensions** (Without Fixings – W x H x D)	180mm x 400mm x 180mm / 7" x 16" x 7"	
Net Weight (Without Fixings)	6 kgs / 13.5 lbs	
Shipping Dimensions (W x H x D)	501mm x 380mm x 501mm / 20" x 15" x 12"	
Shipping Weight	8 kgs / 18 lbs	
Power & Connections		
Power Supply	External- AC mains (up to 120VAC only)	
Power Input Rating	100-120VAC 60Hz 120VA	
Power Factor	0.9	
Power Consumption	105W	
Typical Power & Current	Measurements done with all LEDs at maximum intensity. Measurements made at nominal voltage. Allow for a deviation of +/- 10%.	
Power connector Input	Terminal Block: plug-in screw connector (Input only) (use softer AC cable like SJOW type)	
Cooling System	Natural convection	
Operating Temperature	0°C to 40°C (ambient)	
Construction	Anodized aluminum extrusion	
Color (RAL)	RAL 9005 (Black)	RAL 9010 (White)
Built-In Hardware	Mounting bracket (12.7mm / 1/2" diameter hole)	
IP Rating	IP20	
Approvals	ICES-003 Issue 6:2016 / FCC Part 15 Subpart B:2016	
Control & Photometric		
Control Modes	Phase cut mains dimming	
Dimming Curve	Theatrical	
Hot Lumen Output	6,000 (Narrow)	
Optics	Fully Homogenized	
Beam Angle	Narrow lens (factory installed) : ~ 32° Medium lens (holographic film) : ~ 42° Wide lens (holographic film) : ~ 65°	
Beam Distribution	Symmetrical direct illumination	
CCT	3000K	
CRI	90	
Lamp Life	L70 at 50,000 hours	

****For exact measurements please refer to the line drawings below**



4.2. Drawings – Dimensions

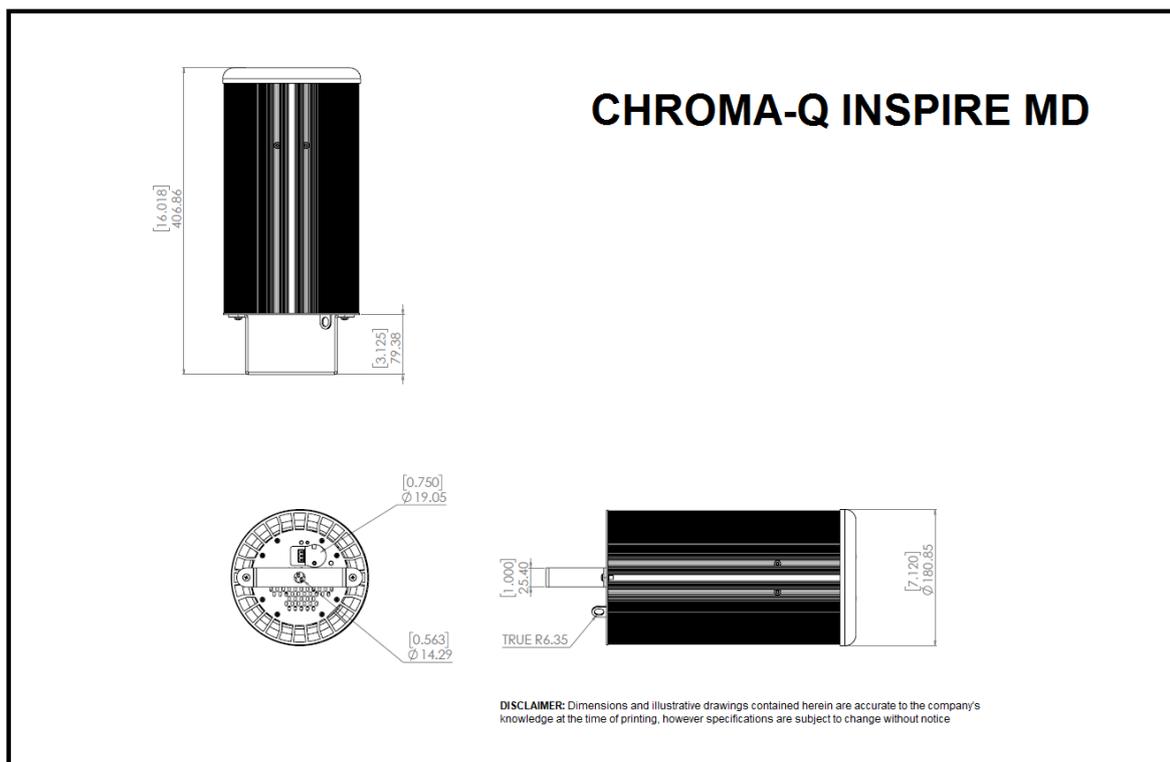


Figure 6

5. Maintenance

With care, the Inspire™ MD fixture requires little maintenance. However, as the unit is likely to be used in a stage environment, we recommend periodic inspection and cleaning of any accumulated debris.

Do not spray liquids on the front or rear panel. If the front enclosure requires cleaning, wipe with a mild solvent free detergent on a damp cloth.