

LED Explosion-proof Floodlight

General Safety Information

- To reduce the risk of death, personal injury or property damage from fire, electric shock, falling parts, cuts/abrasions, and other hazards, read all warnings and instructions included with and on the fixture box and all fixture labels.
- Before installing, servicing, or performing routine maintenance on this equipment, please follow these general precautions.
- Commercial installation, servicing and maintenance of luminaires should be performed by a qualified licensed electrician.
- DO NOT INSTALL A DAMAGED PRODUCT!
- Make sure that the supply voltage is the same as the luminaire voltage.
- Do not install in areas where the marked operating temperatures exceed the ignition temperatures of the hazardous atmosphere.
- Do not operate in ambient temperatures above those indicated on the luminaire nameplate.
- All gasket seals must be clean and undamaged.



SPECIAL CONDITIONS OF USE

- When used in dust atmosphere, under certain extreme circumstance, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore, the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth.
- All cable entry holes shall be fitted with either an IECEx/ATEX/UKEX certified cable gland or an IECEx/ATEX/UKEX certified stopping plug that is suitable for the application. If stopping plug is provided by the manufacturer of lighting, the stop plug shall be used where a protection against rise of mechanical damage is provided.
- The input terminals shall only be fitted with wires that have cross sectional area falling within the following limitations:
 - » Type-221-482 series terminals: finely stranded and standard: min. 1 mm² to 4 mm² or AWG 18 to AWG 12.
 - » Type-221-483 series terminals: finely stranded and standard: min. 1 mm² to 4 mm² or AWG 18 to AWG 12.
 - » Type-221-485 series terminals: finely stranded and standard: min. 1 mm² to 4 mm² or AWG 18 to AWG 12.
- The tighten torque of the screws used to fix the tank cover shall be equal to 6N.m.
- The equipment shall be installed such that the supply cable is protected from mechanical damage. The cable shall not be subjected to tension or torque. If the cable is to be terminated within an explosive atmosphere then the free end shall be terminated in a suitably certified termination facility.
- An external grounding or equipotential connection is required, the cross-sectional area of grounding shall be 4mm² at least.
- Clean the luminaire regularly to prevent dust accumulation.
- When assembly, operation and maintenance, the operator should follow the requirements of IEC/EN 60079-14 Explosive atmospheres-part 14: Electrical installations design, selection and erection, beside of the manufacturer's operating instructions.

LED Explosion-proof Floodlight

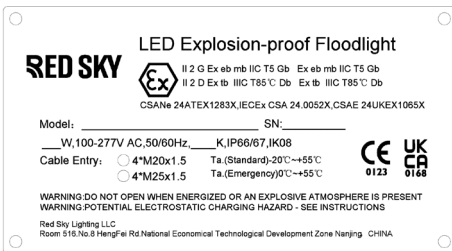
CAUTION:

- You can prevent static electricity by wiping with a wet cloth.
- Wear gloves and safety glasses at all times when removing luminaire from carton, installing, servicing or performing maintenance.
- Avoid direct eye exposure to the light source while it is on.
- Properly handle small parts and destroy packing material, as these may be hazardous to children.

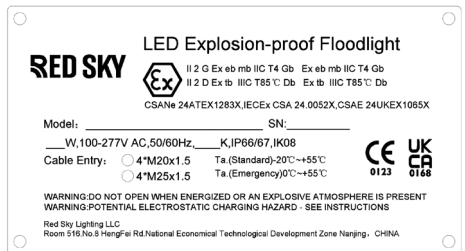
Applicable Standards:

IECEX	ATEX	UKEX
IEC 60079-0:2017 Ed 7.0	EN IEC 60079-0:2018	EN IEC 60079-0:2018
IEC 60079-7:2017 Ed 5.1	EN 60079-7:2015+A1:2018	EN 60079-7:2015+A1:2018
IEC 60079-18:2017 Ed 4.1	EN 60079-18:2015+A1:2017	EN 60079-18:2015+A1:2017
IEC 60079-31:2022 Ed 3.0	EN IEC 60079-31:2024	IEC 60079-31:2024

Nameplate (UKEX , ATEX & IECEX)



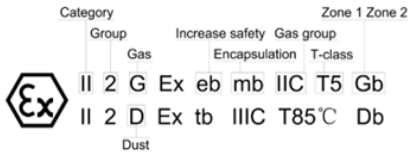
Nameplate for BLX-7L/15L & BLX-7L-***-EM/15L-***-EM



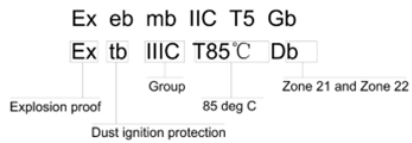
Nameplate for BLX-20L/25L/30L

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ATEX/UKEX:



IECEX:



MODELS:

BLX - 1 - 2 - 3 - 4 - 5 - 6 - 7 - 8 - 9 - 10

1=Lumen Level (7L=7,000Lm, 15L=15,000Lm, 20L=20,000Lm, 25L=25,000Lm, 30L=30,000Lm)

2=Voltage (100-277=100-277V AC)

3=CCT (57K=5700K, 4K=4000K, 3K=3000K)

4=Beam (30=30°, 60=60°, 90=90°, 120=120°)

5=Rating (X1=Zone 1, 21)

6= Lens (CG=Clear Glass, DG=Diffuse Glass*)

7= Color (GRY=Grey, BLK=Black, WHT=White, BRZ=Bronze)

8= Mounting (SYK=Straight Yoke, AYK=Angled Yoke)

9=Battery (Blank=Non-emergency, EM01=Emergency01**, EM02=Emergency02**)

10=Cable Entries (M20=4×M20, M25=4×M25,)

IK means impact protection degree

IP means dustproof and waterproof degree

Ta: -20°C to +55°C (Operating temperature range of the standard model)

0°C to +55°C (Operating temperature range of the Emergency model)

0123 means the Number of notify body that released the QAR & QAN.

0168 means the Number of notify body that released the UKEX QAN.

*Diffuse Glass only available for 7L and 15

**EM only available for 7L and 15L

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WARNING

WARNING:DO NOT OPEN WHEN ENERGIZED OR AN EXPLOSIVE ATMOSPHERE IS PRESENT

WARNING:POTENTIAL ELECTROSTATIC CHARGING HAZARD - SEE INSTRUCTIONS

WARNING:DO NOT REPLACE BATTERY WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

WARNING:USE ONLY REPLACEABLE BATTERY PACK KRH33/62(D) 6000mAh,9.6V

(From Red Sky Lighting LLC)

Operating characteristic

Rated voltage	Power	Model	Ambient Temp	T-class/Gas	T-class/Dust	Emergency	
100-277V AC	40W	BLX-7L	0°C~+55°C	T5	T85°C	EM	
	90W	BLX-15L				EM	
	40W	BLX-7L	-20°C~+55°C			T4	
	90W	BLX-15L					
	115W	BLX-20L					
	145W	BLX-25L					
	180W	BLX-30L					

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STD Series - General Wiring Diagram

CAUTION:

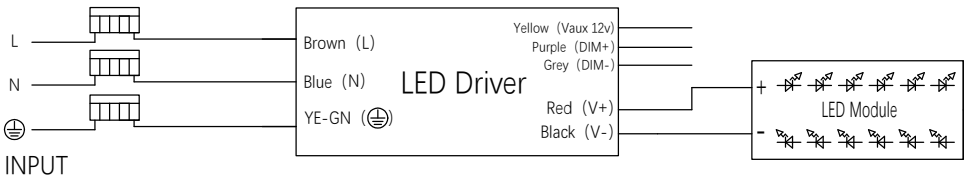
Turn off electrical power at fuse or circuit breaker box before wiring luminaire to the power supply.

Connecting panels to AC source supply:

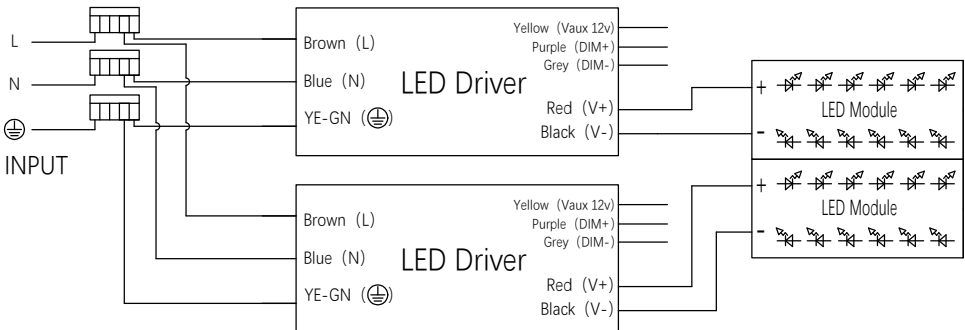
All units must be individually connected to the AC supply.

Black = Line
 Blue = Neutral
 YE-GN = Ground

BLX-7L/15L



BLX-20L/25L/30L



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EM Series - General Wiring Diagram

CAUTION:

Turn off electrical power at fuse or circuit breaker box before wiring luminaire to the power supply, **And insert the "battery -" into the wiring terminal.**

Connecting panels to AC source supply:

All units must be individually connected to the AC supply.

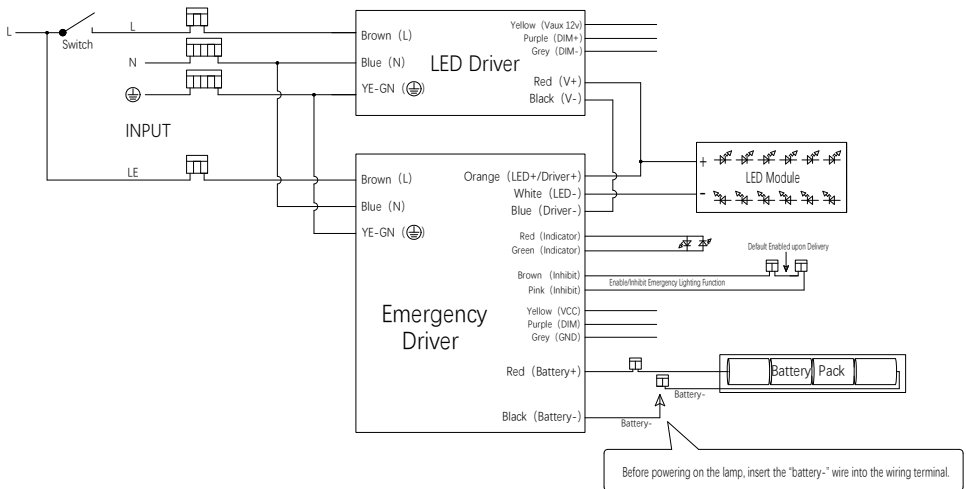
Brown(L) = Line 1(supply)

Brown(LE) = Line 2(emergency)

Blue = Neutral

YE-GN = Ground

BLX-7L-***-EM/15L-***-EM



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Installation & Operation

Electrical Connection:

- Loosen the four pcs of M6 hexagon bolts of the tank cover at torque value 6 N-m;
- The thread of entry hole of Tank is M20 and M25. Connect the Tank to suitable cable gland or conduit;
- The user shall be equipped the cable entry device with an explosion-proof lead-in device and the plug is M20 and M25. Inset the wire from outside through the cable gland or conduit and the entry hole of Tank, and then connect to terminal block according to the wiring diagram;

If it is the EM series, the "battery -" must be inserted into the wiring terminal before Re-attach the tank cover.

- For detailed information, please refer to the General Wiring diagram of the EM series.
- Re-attach the tank cover and tighten it by four pcs of M6 hexagon bolts of terminal cover at torque value 6 N-m;
- Check the tightness of cable gland (conduit) and terminal cover.
- NOTE: Parts necessary to achieve a specific type of protection or used to prevent access to uninsulated live parts shall be capable of being released or removed only with the aid of a tool.

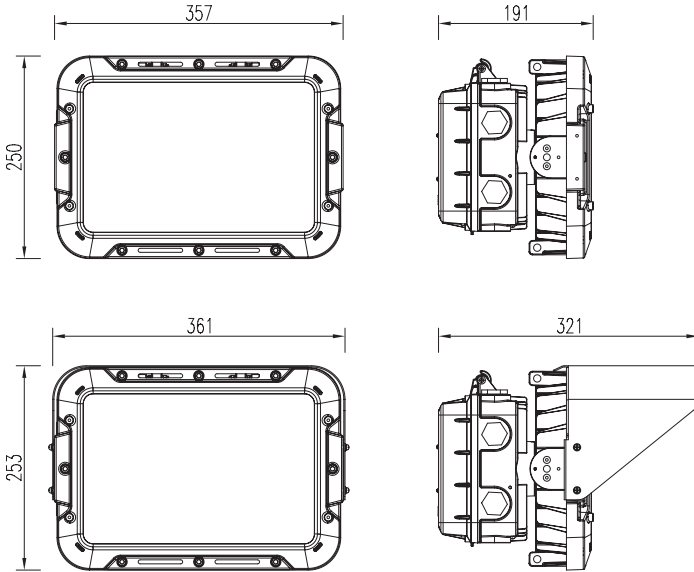
NOTE: Further information on the installation of conduit or associated fittings into threaded or plain holes can be found in EN 60079-14.

General product information:

The model BLX series explosion-proof LED luminaires are suitable for use in Zone 1 and Zone 21 explosive atmospheres. The luminaire consists of two chambers. One is the wiring compartment in protection type Ex eb , where the LED driver evaluated in protection of Ex mb. The other is the LED array chamber in protection type Ex eb with LED lens in protection type Ex mb. The luminaire transmitting cover is made of tempered glass. The enclosure of luminaire is made of aluminium.

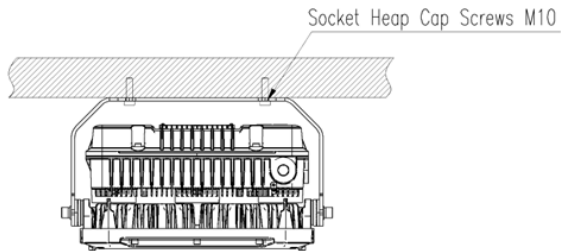
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Product Size unit: mm



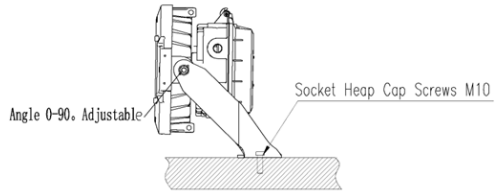
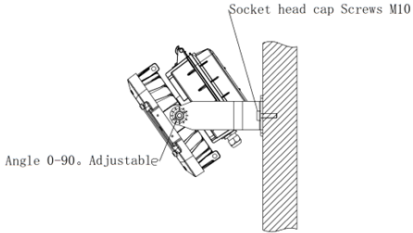
Installation

1. Ceiling

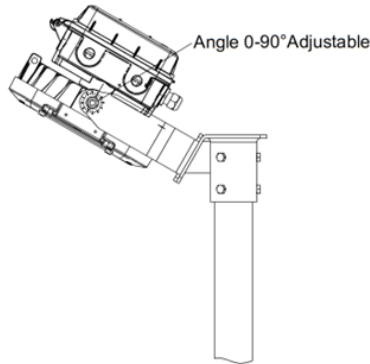


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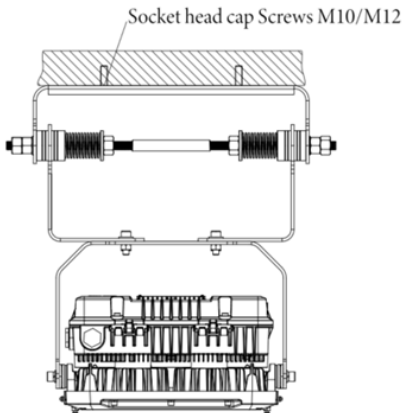
2. Yoke



3. Slip Fitter



4. DPY



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Servicing

To avoid personal injury, disconnect power to the luminaire and allow the unit to cool down before performing maintenance.

Perform visual, electrical, and mechanical inspections on a regular basis. The environment and frequency of use should determine this. However, it is recommended that checks should be made at least once a year.

Frequency of use and environment should determine this.

The external glass should be cleaned periodically to ensure continued luminaire performance. Clean the glass with a clean, damp, non-abrasive, lint-free cloth. If this is not sufficient, use a mild soap or a liquid cleaner.

Do not use an abrasive, strong alkaline or acid cleaner as damage may occur.

Inspect the cooling fins on the luminaire to ensure that they are free of any contamination (i.e. excessive dust build-up). Clean with a non-abrasive cloth if needed.

Mechanically check to make sure all parts are properly assembled.

Electrically check to make sure that all connections are clean and tight.

Repair and maintenance

Repair and maintenance work shall be conducted by the end user only after the LED luminaire is not energized. Repair and maintenance shall be conformed to EN&IEC 60079-19.

In addition, the relevant national regulation which apply to the maintenance/servicing of electrical apparatus in explosive atmospheres shall be observed.

Any unforeseen repairs or overhaul may only be carried out with RSL spare parts. LED driver and LED lens chamber must not be repaired by the end user.

If the EM series Luminaire fixtures have not used the emergency lighting function within 6 months, the emergency lighting function should be activated once until it stops, and then recharged to cycle the battery and ensure the battery's service life.

NOTE: Should the luminaire enclosure be damaged, only a full luminaire replacement will be permitted. In case of doubt, the equipment should be returned to RSL for inspection/repair.

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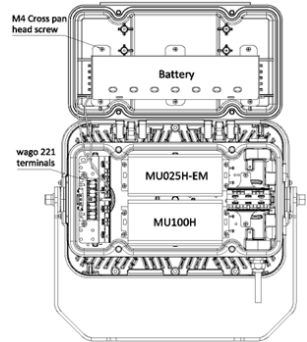
WARNING

Modifications to the device or changes of its design are not permitted.

This equipment must be operated according to the intended purpose in a perfect and undamaged condition.

The Battery Replacement

1. Loosen the four pcs of M6 hexagon bolts of tank cover at torque value 6 N-m;
2. Disconnect the wires connecting the wago 211 terminals with the luminaire ;
3. Loosen the six M4 bolts on the battery pack;
4. Replace with a new battery pack and tighten the six M4 bolts at torque value 3 N-m;
5. Connect the wires connecting the wago 211 terminals with the luminaire ;
6. Re-attach the tank cover and tighten it by four pcs of M6 hexagon bolts at torque value 6 N-m.



NOTE: Batteryreplacement needs to be done in a non-hazardous location!

NOTE: Do not reverse charge batteries!

Nameplate

Ni-CD Rechargeable Battery Pack

KRH33/62(D)6000TX8 9.6V

SN: _____

WARNING - DO NOT REPLACE BATTERY WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

WARNING - USE ONLY REPLACEABLE BATTERY PACK KRH33/62(D) 6000mAh,9.6V
(From Red Sky Lighting LLC)

Red Sky Lighting LLC
Room 516.No.8 HengFei Rd.National Economical Technological Development Zone Nanjing, CHINA

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Inspection

Within the scope of maintenance or inspection routine the following should be included:

- Protective hoses covering the connection cables
- Cable entries must be free of corrosion.
- Perform visual mechanical and electrical inspections on a regular basis. We recommend routine checks to be made on a yearly basis.
- The PC cover should be cleaned periodically as needed to ensure continued photometric performance.
- Inspect the luminaire to ensure that it is free of any obstructions or contamination (i.e. excessive dust build up).
- Clean with a non-abrasive, damp cloth if needed.

EM Series Self-Testing/Self-Diagnostic

- Self-Testing/Self-Diagnostic is a way to automatically test emergency lighting operation without any additional outside interaction. This feature helps to reduce time and labor that comes with code-compliant testing which will overall reduce maintenance costs. This feature helps to ensure that testing is done as required by conducting one hundred eighty (180) second test every thirty (30) days and thirty (30) minute test every twelve (12) months. During the Self-Diagnostic testing period the light level is reduced to that of the emergency output light level. The unit continuously monitors battery health to ensure sufficient capacity is maintained to meet required minimum emergency times. The indicators LED will flash appropriate error codes to provide visible alerts (see Self-Diagnostics Indication table located on spec sheet.

EM Series LED Indicators Status

● Flashing Green, 250ms on/ 250ms off	System OK/AC OK (Self-diagnostic Enabled);Fast charge.
● Flashing Green, 500ms on/ 500ms off	System OK/AC OK (Self-diagnostic Enabled);Trickle charge
● Solid Green	System OK/AC OK (Self-diagnostic Enabled);Battery is full;When external normal driver is turned off (unelectrified) in EM charging
● Flashing Red, 250ms on/ 250ms off	Normal working in EM mode.
● Slow Flashing Red, 250ms on/ 750ms off	Working in EM mode and the voltage of battery is low.
● Solid Red	One of the below failure status. 1. AC is powered on, INHIBIT switch is off. 2. Output under voltage or open circuit. 3. Battery PACK not found or Failure; check BAT pack. 4. Charging circuit is abnormal, check EM Driver.
● Green/Red alternative flashing	Self-diagnostic process ongoing.

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Internal and external grounding

Internal earthing are provided in the tank compartment and end shield. The internal earthing bolt: M4x8, torque is 3N-m, the section area of internal earthing wire is 4 mm².

The external bonding is provided on the external surface of the tank. The internal earthing bolt: M4x10.

The external earthing wire is 4 mm². The torque of external bonding is 3 N-m. External bondings are secured against loosen.

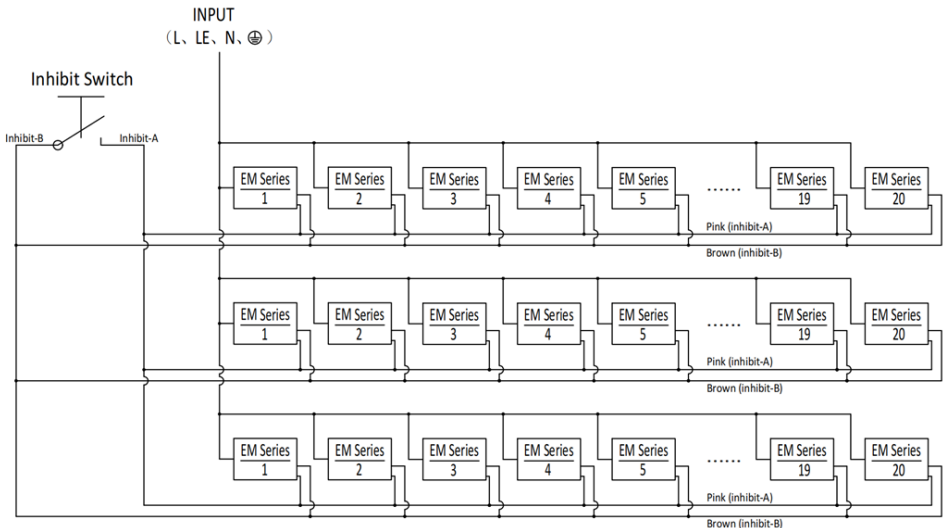
Repair the luminaire

Use hexagonal wrench to open the screw of the tank cover of enclosure, then the LED driver can be installed or replaced by the end user. How to replace the LED driver shall be contact to RSL authorized distribution partner or RSL. The driver must not be replaced by other brands.

The LED array must only be replaced by RSL or the luminaire shall be return to RSL for repair.

EM Series Inhibit Functionality Guide

Schematic diagram



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Function

Step1: When person are working normally, INPUT is in power on supply state, all EM lighting fixtures are working normally.

Step2: When person leave and turn off INPUT. The INPUT stops power supply, all EM lighting fixtures switch to emergency states.

Step3: When person is at the exit gate, open inhibit switch to turn off the emergency all EM lighting fixtures, and no light output.

Step4: When person return again, closes inhibit switch to turn on all lighting fixtures at the emergency state.

Step5: Finally, person turn on the INPUT. INPUT is in power on supply state, all EM lighting fixtures are working normally and charging battery in parallel.

Requirement

One inhibit switch can control three groups fixtures.

Each groups 20 lighting fixtures, connected in parallel.

Warranty

We warrant that each of our LED lighting luminaire (the "Product(s)") that are purchased while this Warranty is in effect will be free from defects in materials and workmanship for the period of time specified in the table below (the "Warranty Period"). The Warranty Period runs from the date of original purchase from its authorized distributor/dealer.

We will repair, or at our option, replace the defective product (exterior finish, housing and heat sinks, lens, LED engine, power supply) during the standard 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 our instructions.

This warranty excludes defects resulting from improper installation, acts of God, fire, vandalism or civil disturbances, power surges or improper power supply, and corrosive environment installations.

This warranty does not cover equipment, systems or components from other manufacturers that the Purchaser uses in conjunction with the Product. Any repair, alteration or modification of the Product, including replacement of Product components with components of other manufacturers will void the warranty in its entirety

Product	Models Covered by Warranty	Warranty Period
BLX Series LED Explosion-proof Floodlight	BLX Series	Driver-five(5) Years LEDS- Ten (10) Years
Ni-CD Rechargeable Battery Pack	BLX Series	One (1) Year

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Limitation of Liability

THE FOREGOING WARRANTY IS EXCLUSIVE, AND IS THE SOLE REMEDY FOR ANY AND ALL CLAIMS, WHETHER IN CONTRACT, IN TORT OR OTHERWISE ARISING FROM THE FAILURE OF PRODUCT AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING ALL WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WHICH WARRANTIES ARE HEREBY EXPRESSLY DISCLAIMED TO THE EXTENT PERMITTED BY LAW AND, IN ANY EVENT, SHALL BE LIMITED TO THE WARRANTY PERIOD SPECIFIED ABOVE. THE LIABILITY OF SHALL BE LIMITED TO THE TERMS OF THE EXPRESS WARRANTY SET FORTH HERE IN. IN NO EVENT WILL BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES INCLUDING, WITHOUT LIMITATION, DAMAGES RESULTING FROM LOSS OF USE, PROFITS, BUSINESS OR GOODWILL, LABOR COSTS, REMOVAL OR INSTALLATION COSTS, DECREASE IN THE LIGHT OUTPUT OF THE LAMP, AND/OR DETERIORATION IN THE LAMP'S PERFORMANCE, WHETHER OR NOT HAS BEEN ADVISED OF THE POSSIBILITY THEREOF. UNDER NO CIRCUMSTANCES SHALL 'S ENTIRE LIABILITY FOR A DEFECTIVE PRODUCT EXCEED THE PURCHASE PRICE OF THAT PRODUCT. WARRANTY SERVICES PROVIDED UNDER THESE TERMS AND CONDITIONS DO NOT ENSURE THE UNINTERRUPTED OPERATION OF PRODUCTS; SHALL NOT BE LIABLE FOR DAMAGES CAUSED BY ANY DELAYS INVOLVING WARRANTY SERVICE.

This Limited Warranty gives you specific legal rights and you may also have other rights that may vary from state to state. Because some states or jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damages, this limitation may not apply to you.