









# The LS Series Installation Manual

# TEMPORARY LIGHTING STRING





### **APPLICATION**

Intended for temporary lighting requirements in industrial, marine and hazardous locations, the LS light stringer is rated for indoor and outdoor use. With a protection level of IP66 / NEMA4X the versatile LS offers a lightweight solution for surface and hook mount applications during construction, operation and maintenance.

Conforms to:

UL 844, UL 1088, CAN/ULC-S1088, UL 1598, UL 1598A:

CSA 22.2 No. 137

Hazardous Location

Certification:

Class I, Division 2, Groups ABCD, T5;

Class II, Division 1, Groups EFG, T5;

Class III;

Class I, Zone 2, Groups IIC; Class I, Zone 20, Groups IIIC

Housing:

Copper-free Case Aluminum & Borosilicate Glass

Rated Voltage:

120 VAC , 50/60 Hz

Rated Power:

19.5W per module

Connections:

Standard: Black: Line | White: Neutral | Green: Ground

Temperature Range:

-50° C to +70° C

Ingress Protection:

IP66/67 | Suitable for Wet Locations. Marine Outside type (Salt water).







### Warning

CAUTION: To avoid risk of fire, explosion, or electric shock, this product should be installed, inspected, and maintained by a qualified electrician in accordance with all applicable codes. Supply connector must be rated for location and zone of use.

ATTENTION: Pour réduire le risque d'inflammation des atmosphères dangereuses et a fin déviter les chocs électriques, ce produit doit être installé, inspecté, et entretenu par un électricien qualifié conformément à tous les codes applicables. Le connecteur d'alimentation doit être adapté à l'emplacement et à la zone d'utilisation.



### WARNING

NOTE: For use only on GFCI protected circuits when installed with connector or plug.

VEUILLEZ NOTER: Utiliser seulement sur des prises protégées de disjoncteur-detecteur de fuite a la terre.



### WARNING

CAUTION – To reduce the risk of electric shock do not connect or disconnect when wet.

ATTENTION: Pour reduire les dangers de shoc électrique, ne pas brancher ou debrancher une fois mouillé.



### WARNING

CAUTION: To reduce the risk of ignition of hazardous atmospheres, disconnect the luminaire from the supply circuit before opening. Keep tightly closed when in operation.

ATTENTION: Pour réduire le risque d'inflammation des atmosphères dangereuses, débranchez le luminaire du circuit électrique avant d'ouvrir. Conserver hermétiquement fermé lorsqu'il est en fonctionnement.

### PRE-ASSEMBLED TEMPORARY STRING LIGHTS

Refer to alternate instructions for LS-KIT

This product must be wired, installed, and maintained by a qualified electrician.

Refer to CEC/NEC codes and follow all local standards applicable to the area of installation

Make electrical connections in a Listed/Recognized junction box (Not Provided) or Listed/Recognized connector approved for a minimum of 120VAC/8A. If the temporary lighting string will be connected inside a classified (hazardous) zone, connector must be rated for the hazardous Class and Division/Zone where the connection is made.

If the temporary lighting string will be installed in a wet location, the junction box or connector used must be Listed/Recognized for use in Wet Locations.

#### STEP 1:

Inspect shipping package and contents to ensure no damage has occurred during shipping.





### **INSTALLATION (CONT.)**

### STEP 2 (Optional):

Attach Surface mount accessory using supplied M4 screws (2). Torque fasteners to 20 in-lbs (2.3 N-m) or use Strap/Stainless Steel Clamp to fasten fixture to desired location.

#### STEP 3:

If not ordered with pre-installed connector, install suitable UL/CSA Listed or Recognized connector for the environment and zone where the electrical connection will be made or connect wiring lead to a Listed junction box suitable for the environment and zone of use. Ordinary location plugs may be used only if the electrical connection to power is made outside of all hazardous environments or classified zones. Where connections to electrical power will be made inside hazardous classified zones, only UL/CSA Listed or Recognized connectors rated for the environment, Class/Division or Zone, temperature, and hazardous gas or dust group present may be used.

#### STEP 4:

For raised installations, attach light stringer to fixed infrastructure (handrail, exposed beams, pipe rack, etc.) in desired location with adjustable strapping, hook, or surface mount bracket accessories. Cam buckle straps, stainless steel mounting clamps, hook and surface mounts are available separately.

#### NOTE:

For replacement of damaged Cord, refer to Assembly of LS-KIT into Approved Temporary String Light instructions on page 3-4.

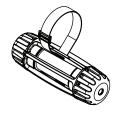
#### STEP 5:

Plug-in or energize circuit.



Step 2





STAINLESS STEEL STRAP ACCESSORIES ARE AVAILABLE IF REQUIRED







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ATTENTION: Pour réduire le risque d'inflammation des atmosphères dangereuses et a fin déviter les chocs électriques, ce produit doit être installé, inspecté, et entretenu par un électricien qualifié conformément à tous les codes applicables. Le connecteur d'alimentation doit être adapté à l'emplacement et à la zone d'utilisation.



# **WARNING**

NOTE: For use only on GFCI protected circuits when installed with connector or plug.

VEUILLEZ NOTER: Utiliser seulement sur des prises protégées de disjoncteur-detecteur de fuite a la terre



### WARNING

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### WARNING

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ATTENTION: Pour réduire le risque d' inflammation des atmosphères dangereuses, débranchez le luminaire du circuit électrique avant d'ouvrir. Conserver hermétiquement fermé lorsqu'il est en fonctionnement.

# ASSEMBLY OF LS-KIT INTO APPROVED TEMPORARY STRING LIGHT

Refer to alternate instructions for Pre-assembled Temporary String Lights

This product must be wired, installed, and maintained by a qualified electrician.

Refer to CEC/NEC codes and follow all local standards applicable to the area of installation

Make electrical connections in a Listed or Recognized junction box (Not Provided) or Listed/Recognized connector approved for a minimum of 120VAC/8A. If the temporary lighting string will be connected inside of a classified (hazardous) zone, connector must be rated for the hazardous Class and Division/Zone where the connection is made.

#### STEP 1:

Inspect shipping package and contents to ensure no damage has occurred during shipping.





# **INSTALLATION (CONT.)**

#### STFP 2:

Strip 95mm (3.75in) of cable jacket, and trim back any filler. Strip conductor insulation 10mm (0.39in) from ends. Feed wire through end cap, rubber gland, and gland cap. Install cord clamp and tighten to 20 in-lbs (2.3 N-m) so that cable jacket protrudes 5mm past the end of the cord clamp.

Slide together end cap, rubber gland, and gland cap assembly, before fastening with three M4 socket head cap screws torqued to 20 in-lbs (2.3 N-m).

### NOTE:

Electrical cord used must be 14 Gauge/3 Conductor SOOW with an outer diameter between 13mm [0.51"] and 14.2mm [0.56"]. SOOW cord must be rated for 600V/105°C or higher.

Maximum string length must not exceed 300 ft.

Maximum number of lighting modules must not exceed 30 units on a single string.

### STEP 3:

Connect each conductor into appropriate connectors

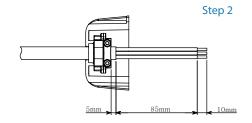
#### STFP 4:

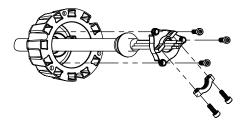
Wrap excess conductor inside cap and gently rotate to compress wires (without pinching them) till the assembly holes align with the core and internal wires are not strained or pinched.

Attach End Cap Assembly to the core with the supplied M4 socket head cap screws (3) with M4 hex driver torque to 2.3 N-m (20 in-lbs).

### STEP 5:

Repeat steps 2-4 for other side of module.





Step 4







# **INSTALLATION (CONT.)**

#### STEP 6:

To Maintain ingress protection the final module must have the blank end plugged. On the end module, assemble the cord clamp and gland cap together using two M4 fasteners and Torque to 20 in-lbs (2.3 N-m). Install rubber Gland, Gland Cap assembly, and cylindrical plug into the un-wired end-cap and torque M4 fasteners to 20 in-lbs (2.3 N-m) to secure in place and compress gland seal around the cylindrical plug.

Attach End Cap Assembly to the core with the supplied M4 socket head cap screws (3) with M4 hex driver torque to 2.3 N-m (20 in-lbs).



Attach mounting accessory if used (refer to Step 2 in LS installation).

### STEP 8:

Install suitable UL/CSA Listed or Recognized connector for the environment and zone where the electrical connection will be made or connect wiring lead to a listed junction box suitable for the environment and zone of use. Ordinary location plugs may be used only if the electrical connection to power is made outside of all hazardous environments or classified zones. Where connections to electrical power will be made inside hazardous classified zones, only UL/CSA Listed or Recognized connectors rated for the environment, Class/Division or Zone, temperature, and hazardous qas or dust group present may be used.

#### STEP 9:

For raised installations, attach light stringer to fixed infrastructure (handrail, exposed beams, pipe rack, etc.) in desired location with adjustable strapping, hook, or surface mount bracket accessories. Cam buckle straps, stainless steel mounting clamps, hook and surface mounts are available separately.

