# Luminaire For Hazardous Locations Installation and Maintenance Manual Model L1512D

THT-EX

Top Hi-Tech Co., Ltd. 9F 1 Zhongshan Rd Tucheng District, New Taipei, 236 Taiwan. Website: <u>www.tht-ex.com</u>

TEL: +886 2 22671234 FAX: +886 2 22691166 e-mail: <u>sales@tht-ex.com</u>

#### Revision: 201802EL1512DUS01 Subject to alterations.

## 1. General Information

Model L1512D LED luminaires are suitable for use in the following hazardous (classified) areas as defined by the National Electrical Code (NEC) and Canadian Electrical Code (CEC):

- Class I, Division 1, Groups B, C, D
- Class I, Division 2, Groups A, B, C, D
- Class II, Division 1, Groups E, F, G
- Wet Locations (UL 1598)

Refer to the luminaire nameplate for specific classification information, maximum ambient temperature suitability and corresponding operating temperature (T-Code).

Model L1512D LED luminaire is designed for using in indoors and outdoors environment.



Rated Voltage (DCOB): 120/277/347/480 Vac, 50 & 60 Hz

Rated Voltage (DOB): 120/277 Vac,

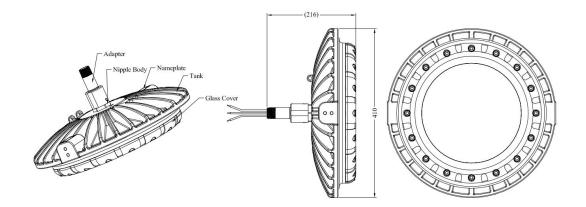
50 & 60 Hz

Ambient Temperate Range:

-25°C ~ +40°C (CID1:T5, CID2:T3, CIID1 :T4A) -25°C ~ +55°C (CID1:T4A, CID2:T3, CIID1:T4)

# **A** WARNING

- ► To avoid the risk of fire, explosion or electric shock, this product should be installed, inspected and maintained by a qualified electrician only, in accordance with all applicable codes and regulations.
- **To avoid electric shock:** 
  - ✓ Be certain electrical power is OFF before and during installation and maintenance.
  - ✓ Luminaire must be supplied by a wiring system required by the NEC and CEC for the specific hazardous locations with an equipment grounding conductor.
- To avoid explosion:
  - ✓ Make sure that the supply voltage is the same as the luminaire voltage.
  - Do not install where the marked operating temperatures exceed the ignition temperature 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.
  - ✓ Before dismounting, electrical power to the luminaire must be turned off. Keep tightly closed when in operation.
- **•** To avoid burning hands, ensure the luminaire is cool when performing maintenance.
- The internal grounding terminal shall be used as the equipment grounding means and the external terminal is only a supplemental bonding connection.
- "WARNING: To prevent ignition of Group B atmospheres conduit runs must have a sealing fitting connected within 9 inches of the luminaire".
- Mounting Orientation Lens horizontal Facing Down or Lens Facing Down 45° from vertical.



### 3. Technical Data

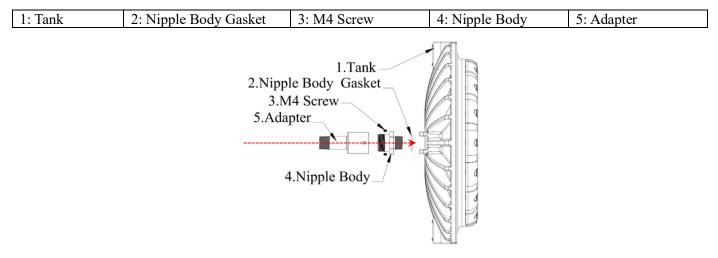
Item	Description		
Rated Voltage	120/277/347/480 Vac, 50 & 60 Hz		
Rated Wattage	140/160/180/200/220/240 W		
Ambient Temperate Range	-25°C ~ +40°C (CID1:T5, CID2:T3, CIID1 :T4A) -25°C ~ +55°C (CID1:T4A, CID2:T3, CIID1:T4)		
Material Enclosure Glass	Aluminum alloy Heat and impact resistant tempered glass		
LED Service Life	60,000 hrs		
Mounting Type / Weight (Net Luminaire Weight: 17.5 kg)	Adjustable Trunnion (Wall & Ceiling) Mounting		
	Wall Wall		
	19.0kg		
Mounting Type / Weight (Net Luminaire Weight: 17.5 kg)	Adjustable Tube Mounting		

Item	Description		
Rated Voltage	120/277/347/480 Vac, 50 & 60 Hz		
Rated Wattage	140/160/180/200/220/240 W		
Ambient Temperate Range	-25°C ~ +40°C (CID1:T5, CID2:T3, CIID1 :T4A) -25°C ~ +55°C (CID1:T4A, CID2:T3, CIID1:T4)		
Material Enclosure Glass	Aluminum alloy Heat and impact resistant tempered glass		
LED Service Life	60,000 hrs		
Mounting Type / Weight (Net Luminaire Weight: 17.5 kg)	Adjustable Trunnion (Wall & Ceiling) Mounting		
	Wall 19.0kg 20.0kg		

#### 4. Assembly and Installation

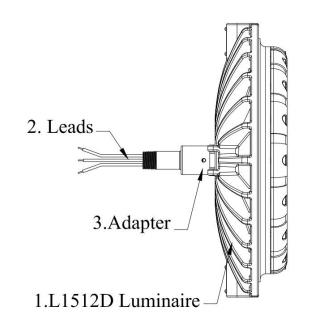
#### 4.1 Electrical Connection

Overview of Nipple Assembly



The Tank is equipped with the hole by mounting the Nipple Assembly.

1: L1512D Luminaire	2: Leads (Length: min, 33 inches)	3: Adapter
---------------------	--------------------------------------	------------

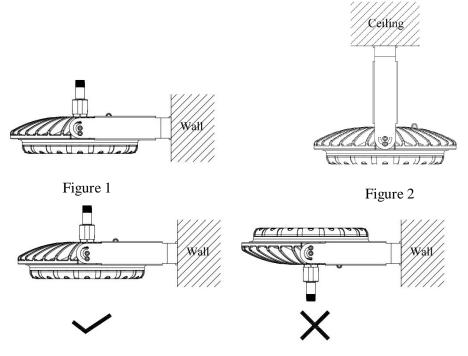


- 1. Insert the leads (2) through the conduit (not shown, provide in the field).
- 2. Connect conduit to 3/4 in, NPT external threads of adapter with at least five full threads engaging.
- 3. Connect branch conduit wires to luminaire wiring necessary raceway component, boxes and fitting required per NEC and CEC. (White-wire connects to Neutral; Red-wire connects to Live; Green-wire connects to Ground.)

#### 4.2 Mounting Bracket Installation

#### 4.2.1 Adjustable Trunnion (Wall & Ceiling) Mounting -

- The mount bracket is for surface mounting to wall (Figure 1) or ceiling (Figure 2).
- Position the bracket holders and secured by means of the provided M8 screws with 122 kgf-cm.
- *©* Secure the wall/ceiling mounting bracket to the mounting surface by using four fasteners (not provided).
- Mounting Orientation Lens horizontal Facing Down or Lens Facing Down 45° from vertical. Don't adjust the Mounting Orientation as "Lens horizontal Facing Up" position. (Figure 3).





#### 4.2.2 Adjustable Tube Mounting -

- This mounting bracket type is for mounting unto the straight electrical tube (Figure 4).
- The assembly of the bracket onto the conduit must be secured with the use of M8 threaded screws and by applying122.0 kgf-cm torque.



Figure 4

#### 5. Maintenance

- To avoid personal injury, disconnect power to the light 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 be made at least once a year. Frequency of use and environment should determine this. It is recommended to follow an Electrical Preventive Maintenance Program as described in the National Fire Protection Association Bulletin NFPA No. 70B: Recommended Practice for Electrical Equipment Maintenance.
- ► The lens should be cleaned periodically to ensure continued luminaire performance. C lean the lens 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.
- Electrically check to make sure that all connections are clean and tight.
- Mechanically check that all parts are properly assembled.

#### 6. Transport, Storage and Disposal

- Transport and storage is only allowed in the original packaging, on the way pointed out on the carton box.
- Transport Shock-free in its original carton, do not drop, and handle carefully.
- Store Store in a dry place in its original packaging.
- ▶ Disposal Ensure environmentally friendly disposal of all components according to the legal regulations.