

# HazLoc LED LUMINAIRE

## Installation and Maintenance Manual

### Model L1403L

# THT-EX

Top Hi-Tech Co., Ltd.  
9F., No. 1, Zhongshan Rd., Tucheng  
District, New Taipei City, 236 Taiwan

Website: [www.tht-ex.com](http://www.tht-ex.com)  
TEL: +886 2 22671234  
FAX: +886 2 22691166

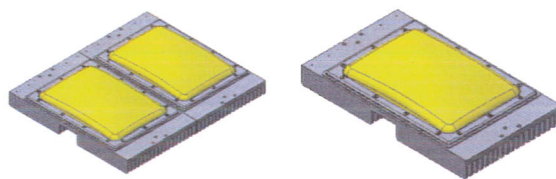
e-mail: [sales@tht-ex.com](mailto:sales@tht-ex.com)  
Pub. Code: RD-UL-L1403L-A  
Subject to alterations  
Revision Level: A0

#### 1. General Information

HazLoc L1403L 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):

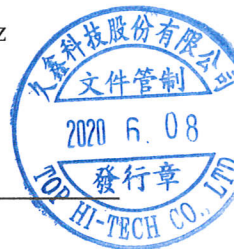
- Class I, Division 2, Groups A, B, C, D
- Wet Locations (UL 1598)

Model L1403L LED Luminaire is designed for using in indoors and outdoors environment.



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

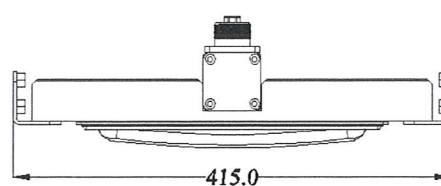
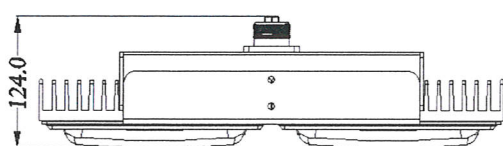
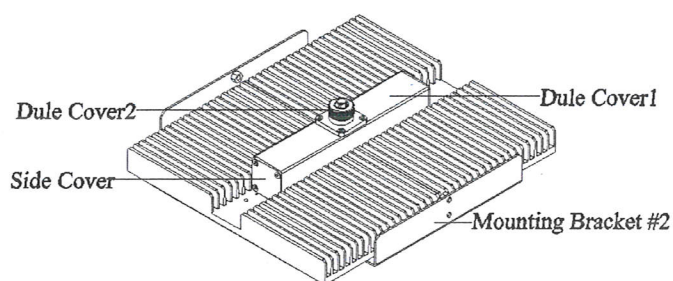
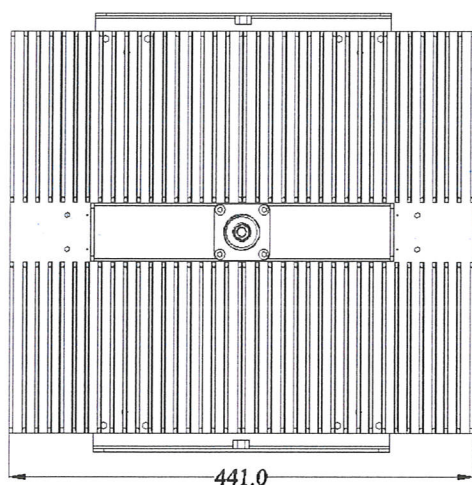
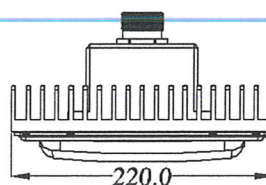
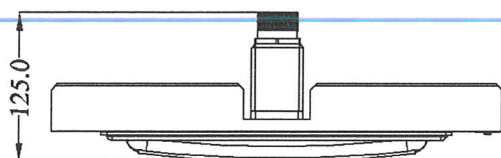
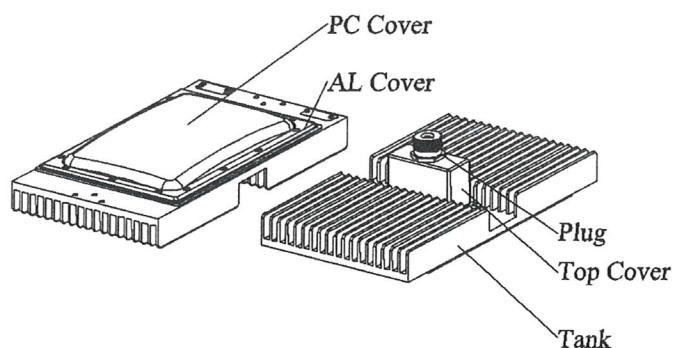
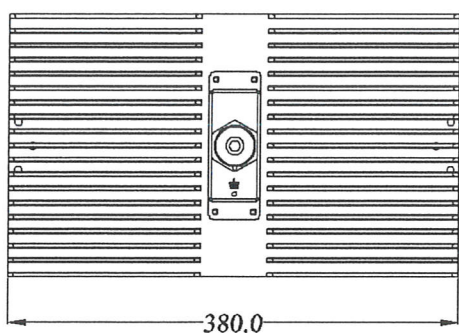
Rated Voltage (SMD):  
120/220/230/277/347/480Vac, 50 & 60 Hz  
Ambient Temperature Range:  
● -20°C ~ +40°C / -20°C ~ +60°C



#### WARNING

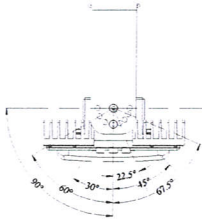
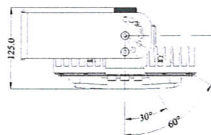
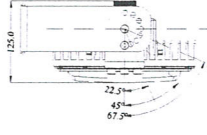
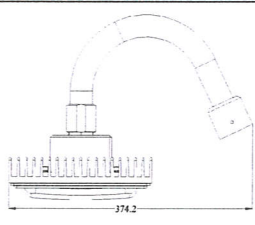
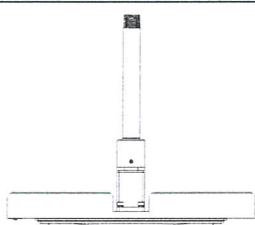
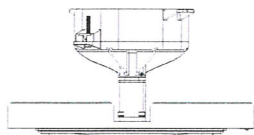
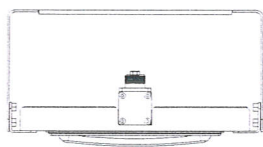
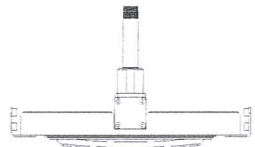

- ▶ To avoid the risk of fire, explosion or electric shock, this product should be installed, inspected and maintained by a qualified electrician only, in accordance with all applicable codes and regulations.
- ▶ To avoid electric shock:
  - ✓ Be certain electrical power is OFF before and during installation and maintenance.
  - ✓ Luminaire must be supplied by a wiring system 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.
  - ✓ Use proper supply wiring as specified on the luminaire nameplate.
  - ✓ 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.

## 2. Dimensions (All Dimensions in mm) – Subject to Alterations



## 3. Technical Data

| Item                          | Description   |
|-------------------------------|---|
| Rated Voltage                 | 120/220/230/277/347/480Vac, 50 & 60 Hz (Note information on type label)             |
| Watts                         | Single Tank 80/ 100/ 105/ 120/ 150 Watts<br>Dual Tank 160/ 200/ 210/ 240/ 300 Watts |
| Power Factor                  | $\cos \phi \geq 0.9$  |
| Ambient Temperate Range       | -20°C ~ +40°C / -20°C ~ +60°C   |
| Material<br>Enclosure / Cover | Aluminum alloy / PC   |
| LED Service Life              | 60,000 hrs  |

| Item                             | Description  |   |  |
|----------------------------------|--|---|--|
| Mounting Type<br>(Single Module) | WHT Mounting Bracket   |   |  |
|                                  |   |   |   |
|                                  | Bending Electrical Tube mounting 25°   | Pendant Mounting Bracket  | Ceiling Bracket Mounting   |
| Mounting Type<br>(Dual Module)   |   |   |   |
|                                  | Hanging Mounting   | Pendant Mounting Bracket  |  |
|                                  |  |  |  |

#### 4. Assembly and Installation

##### 4.1 Electrical Connection

##### Overview of Electrical Connection

1. Fix and Introduce the wires of luminary with the terminal post of Junction Box (White-wire connects to Neutral; Black connects to Live; Green-wire connects to Ground.)

##### 4.2 Single Module Mounting Bracket Installation

##### 4.2.1 Two position Adjustable Trunnion (Wall & Ceiling) Mounting (WHT) – each position with has some angle – Secured to wall/ceiling surface (Lens facing down 90° from vertical = Lens horizontal facing down)

- ☞ The mount bracket is for surface mounting to wall (Figure 1) and ceiling (Figure 2).
- ☞ Position the bracket holders and secured by means of the provided M8 screws with 61 kgf-cm.
- ☞ Secure the wall/ceiling mounting bracket to the mounting surface by using four fasteners (not provided).
- ☞ The luminaire can be adjusted in one position as shown in Figures 1 and 2.

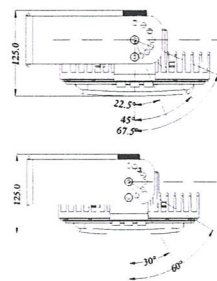


Figure 1

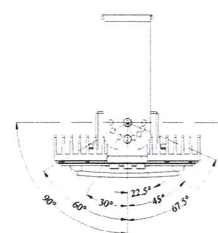


Figure 2



#### 4.2.2 Bending Electrical Tube mounting ( S25)

- ☞ Supplement for the Item 4.1 – Electrical Connection. The thread of entry hole of Connection Base is M35.
- ☞ Introduce the wires of the cord by attached closed-end-terminals as indicated in Item 5.1 – Electrical Connection.
- ☞ The bending electrical tube, one end secured to Nipple Body of Nipple (Adapter) Assembly by integral M35 female threads and with a setscrew; the other end provided with 1-1/2" NPT female threads for connecting with conduit by AHJ.
- ☞ Thread the tube mounting on conduit and torque until wrench-tight with 6600 kgf-cm.

- ☞ Tighten tube locking setscrew to conduit, 1.0 N-m. (Figures 3)

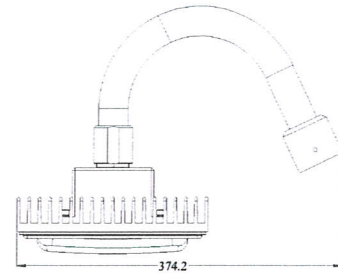


Figure 3



#### 4.2.3 Pendant Mounting Bracket (P90)

- ☞ Supplement for the Item 4.1 – Electrical Connection. The thread of entry hole of Connection Base is M35.
- ☞ Introduce the wires of the cord by attached closed-end-terminals as indicated in Item 5.1 – Electrical Connection.
- ☞ The straight electric tube, one end secured to Nipple Body of Nipple (Adapter) Assembly by integral M35 male threads and with a setscrew; the other end provided with 3/4" NPT male threads for connecting with conduit by AHJ.
- ☞ Thread the tube mounting on conduit and torque until wrench-tight with 1500 kgf-cm.

- ☞ Tighten tube locking setscrew to conduit, 1.0 N-m. (Figure 4)

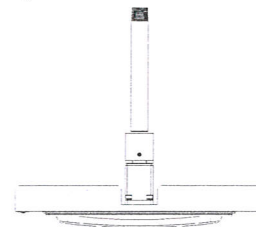


Figure 4

#### Ceiling Mounting Bracket

- ☞ The mounting bracket is for the use of Ceiling mounting type.
- ☞ Position the bracket holders and fix it by means of the provided M8 screws, 61.0 kgf-cm.
- ☞ Capturing the luminares hinge pin inside the adapter hinge hook, clamp the adapter down, Thread the captive closing screw into the adapter, and tighten it to 30 in.-lbs (3.4 N-m).

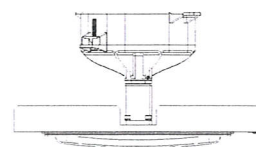


Figure 4

#### 4.3 Dual Module Mounting Bracket Installation

##### 4.3.1 Hanging Mounting Bracket

- ☞ The mount bracket is for surface mounting to ceiling (Figure 5).
- ☞ Position the bracket holders and secured by means of the provided M8 screws with 61 kgf-cm.
- ☞ Secure the Hanging mounting bracket to the mounting surface by using four fasteners (not provided).

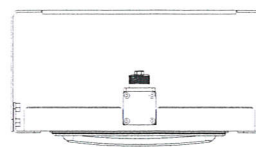


Figure 5

### 4.3.2 Pendant Mounting Bracket

- ☞ Supplement for the Item 4.1 – Electrical Connection. The thread of entry hole of Connection Base is M35.
- ☞ Introduce the wires of the cord by attached closed-end-terminals as indicated in Item 5.1 – Electrical Connection.
- ☞ The straight electric tube, one end secured to Nipple Body of Nipple (Adapter) Assembly by integral M35 male threads and with a setscrew; the other end provided with 3/4" NPT male threads for connecting with conduit by AHJ.
- ☞ Thread the tube mounting on conduit and torque until wrench-tight with 1500 kgf-cm.
- ☞ Tighten tube locking setscrew to conduit, 1.0 N-m. (Figure 6)

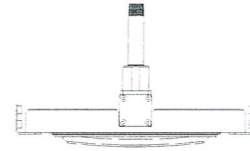


Figure 6



### 4.4 Putting into Service

Before putting into operating, it's necessary to ensure that:

- ☞ the lighting is correctly installed.
- ☞ the connection has been correctly made.
- ☞ the field wiring has been inserted correctly.

## 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 lighting performance. Clean 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.