

# HazLoc LED LUMINAIRE

## Installation and Maintenance Manual

### HazLoc L1102A



Top Hi-Tech Co., Ltd.  
5F., No. 113, Zhongcheng Rd.,  
Tucheng District,  
New Taipei City, 236 Taiwan

Website: [www.tht-ex.com](http://www.tht-ex.com)  
TEL: +886 2 22689570  
FAX: +886 2 22689571  
e-mail: sales@tht-ex.com

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Subject to alterations

## 1. General Information

HazLoc L1102A 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)

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

HazLoc L1102A LED Luminaire is designed for using in indoors and outdoors environment.

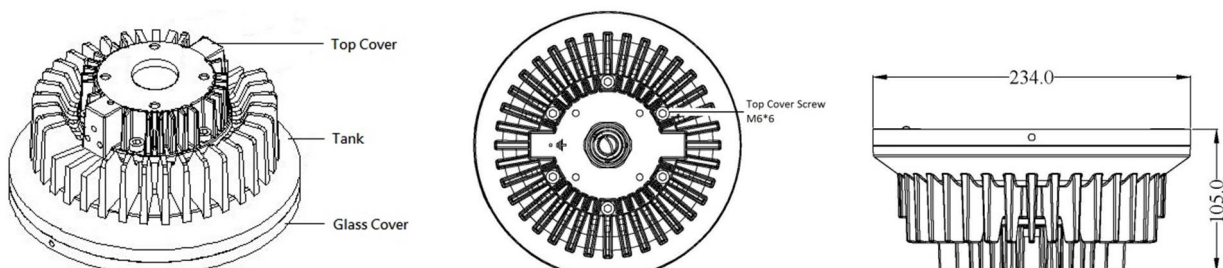


Rated Voltage: 277/480 Vac, 50 & 60 Hz  
Ambient Temperature Range: -40°C ~ +40°C

### 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



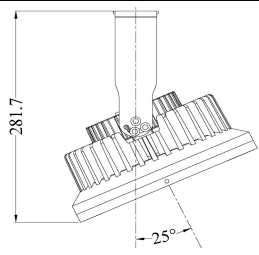
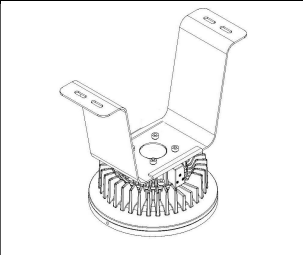
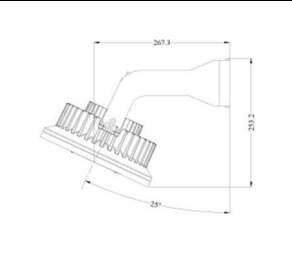
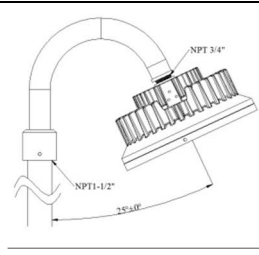
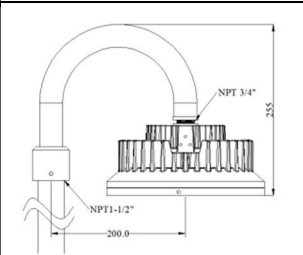
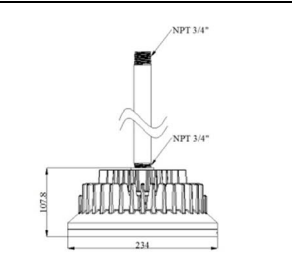
### 3. Model Code

|     |    |   |     |   |   |   |   |      |      |
|-----|----|---|-----|---|---|---|---|------|------|
| THT | 2L | A | 100 | Z | 4 | 9 | C | 1102 | -C90 |
|-----|----|---|-----|---|---|---|---|------|------|

Mounting bracket type, C90 = Ceiling mounting 90°\*  
 Model Name, 1102 = Model L1102A  
 C.C.T., C = Cool White, W = Warm White  
 Voltage, 9 = 277 Vac, C = 480 Vac  
 Temperature class of product, 4 = T4 ( $\leq 135^{\circ}\text{C}$ )  
 Protection type of product, Products without designating protection type  
 Wattage, 100 = 100 W\*\*  
 Current, A = AC  
 Category of Product, 2L = LED lightings use DCOB LED module\*\*\*  
 Brand, THT = Top Hi-Tech Co., Ltd.

\* C90 = Ceiling mounting 90°, W25 = Wall mounting 25°, W90 = Wall mounting 90°, H25 = Pendant mounting 25°, H90 = Pendant mounting 90°, S25 = Bending electrical tube 25°, S90 = Bending electrical tube 90°, P90 = Straight electrical tube 90°  
 \*\* 100 = 100 watt, 80W = 80 watt, 60W = 60 watt  
 \*\*\* 2L = LED lightings use DCOB LED module, 2D = LED lightings use DOB LED module

### 4. Technical Data

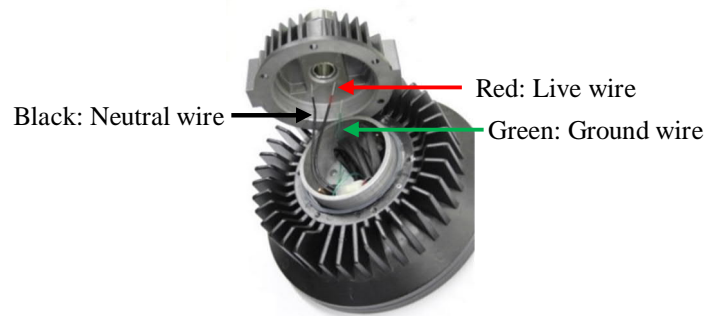
| Item                      | Description   |  |   |
|---------------------------|---|--|---|
| Rated Voltage             | 277/480 Vac, 50 & 60 Hz (Note information on type label)                            |  |   |
| Power Factor              | $\cos \phi \geq 0.9$  |  |   |
| Ambient Temperature Range | $-40^{\circ}\text{C} \sim +40^{\circ}\text{C}$                                      |  |   |
| Material                  | Aluminum alloy  |  |   |
| Enclosure                 | Temperature-resistant pressed glass   |  |   |
| Glass                     |   |  |   |
| LED Service Life          | 60,000 hrs  |  |   |
| Entrance Hole             | NPT 3/4" threaded hole  |  |   |
| Mounting Type / Weight    | Pendant Mounting  | Ceiling Mounting   | Wall Mounting   |
|                           |  |  |  |
|                           | 5.5 kg  | 7.1 kg   | 6.3 kg  |
|                           | Bending Electrical Tube Mounting 25°  | Bending Electrical Tube Mounting 90°   | Straight Electrical Tube Mounting 90°   |
|                           |  |  |  |
|                           | 5.9 kg  | 6.6 kg   | 5.2 kg  |

## 5. Assembly and Installation

### 5.1 Electrical Connection

- ☞ Loosen the 6 M6 screws of Top Cover of the luminaire.
- ☞ The thread of cable entry hole of Top Cover is NPT 3/4". Attach the Top Cover to suitable conduit.
- ☞ Insert the cable from outside through the conduit and the cable entry hole of Top Cover.
- ☞ Introduce the wires of the luminaire with wires of cable by attached closed-end-terminals as following (see picture):  
Black-wire connects to Neutral;  
Red-wire connects to Live;  
Green-wire connects to Ground.

- ☞ Re-attach the Top Cover and tighten it by respective 6 M6 screws with torque value 24.5 kgf-cm.
- ☞ Check the tightness of conduit and Top Cover.



### 5.2 Mounting Bracket Installation

#### 5.2.1 Wall Mounting Bracket (W25 & W90)

- ☞ The mounting bracket is for the use of wall mounting.
- ☞ Position the bracket holders and fix it by means of the provided M6 screws, 24.5 kgf-cm. (Figure 1)
- ☞ Secure the wall mounting bracket to the structure by using four fasteners (not provided). (Figure 2)
- ☞ The lighting can be adjusted up and down by 25°.

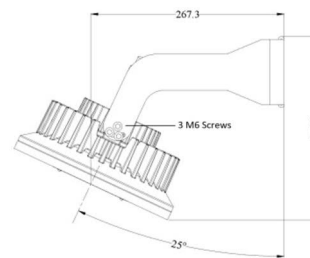


Figure 1

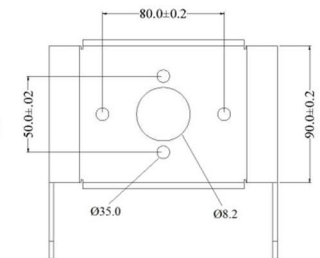


Figure 2

#### 5.2.2 Ceiling Mounting Bracket (C90)

- ☞ The mounting bracket is for the use of ceiling mounting.
- ☞ Position the bracket holders and fix it by means of the provided M6 screws, 24.5 kgf-cm. (Figure 3)
- ☞ Secure the wall mounting bracket to the structure by using four fasteners (not provided). (Figure 4)

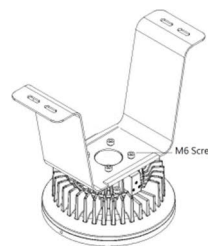


Figure 3

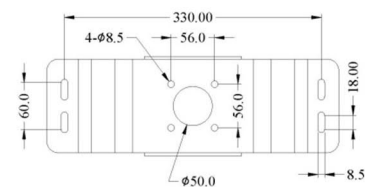


Figure 4

#### 5.2.3 Pendant mounting Bracket (H25 & H90)

- ☞ The mounting bracket is for the use of hanging mounting.
- ☞ Position the bracket holders and fix it by means of the provided M6 screws, 24.5 kgf-cm. (Figure 5)
- ☞ Secure the wall mounting bracket to the structure by using two fasteners (not provided). (Figure 6)
- ☞ The lighting can be adjusted by 25° (see picture).

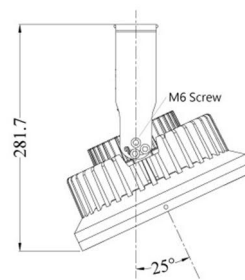


Figure 5

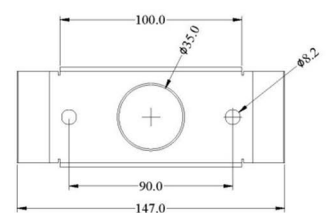


Figure 6

#### 5.2.4 Bending Electrical Tube mounting (S90 & S25)

- ☞ Supplement for the Item 5.1 – Electrical Connection. The thread of cable entry hole of Top Cover is NPT 3/4".
- ☞ Insert the cable from outside through the bending electrical tube and the cable entry hole of Top Cover.
- ☞ Introduce the wires of the luminaire with wires of cable by attached closed-end-terminals as indicated in Item 5.1 – Electrical Connection.

- ☞ Attach bending electrical tube to the Top Cover.
- ☞ One end of tube mounting male threads 3/4" NPT is securing to Top Cover and the other end of tube mounting female threads of 1-1/2" NPT is for supply connection in the field by AHJ.
- ☞ Thread the tube mounting on conduit and torque until wrench-tight.
- ☞ Tighten tube locking set screw to conduit, 1.0 N-m. (Figures 7, 8)

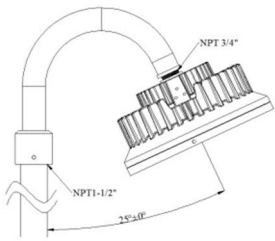


Figure 7

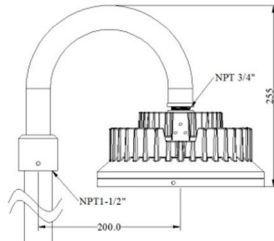


Figure 8

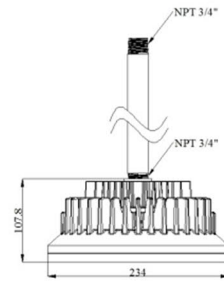


Figure 9

### 5.2.5 Straight Electrical Tube Mounting (P90)

- ☞ Supplement for the Item 5.1 – Electrical Connection. The thread of cable entry hole of Top Cover is NPT 3/4”.
- ☞ Insert the cable from outside through the straight electrical tube and the cable entry hole of Top Cover.
- ☞ Introduce the wires of the luminaire with wires of cable by attached closed-end-terminals as indicated in Item 5.1 – Electrical Connection.
- ☞ Attach straight electrical tube to the Top Cover.
- ☞ One end of tube mounting male threads 3/4” NPT is securing to Top Cover and the other end of tube mounting male threads of 3/4” NPT is for supply connection in the field by AHJ.
- ☞ Thread the tube mounting on conduit and torque until wrench-tight.
- ☞ Tighten tube locking set screw to conduit, 1.0 N-m. (Figure 9)

### 5.3 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 cable has been inserted correctly.

## 6. Maintenance

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- ▶ 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.

## 7. Transport, Storage and Disposal

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- ▶ 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.