# SHENZHEN KHJ SEMICONDUCTOR LIGHTING CO., LTD.

# **Operation & Maintenance Manual**

# KMickeyMouse Series-V2



	Explosion Proof Lighting	Ex db IIC T5 or T6 Gb Ex tb IIIC T95°C or T80°C Db
	Industrial Lighting	

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## **1.Brief Introduction**

1.1.LED source, aluminium alloy explosion proof enclosure. Small size, high safety and stability.

#### 2.Application

2.1. Suitable for oil exploration, oil refining, chemical, military and other hazardous applications use as emergency lighting, and as evacuation lamp after a sudden, accidental power outage, power outages.

2.1.1.Petroleum industry, petrochemical industry, metallurgy industry, power generation industry, fire protection.

2.2.2.Drilling site, combination station, oil refinery as emergency lighting.

2.2. Ambient temperature from -20  $^\circ\!\mathrm{C}$  to 55  $^\circ\!\mathrm{C}.$ 

### 3. Executive standard

- 3.1.EN 60079-0 Explosive atmospheres-Part 0:
- Equipment-General requiements

3.2.EN 60079-1 Explosive atmospheres-Part 1: Equipment protection by flameproof enclosures "d"

#### 4. Product certification

4.1. ATEX,CE and RoHS.

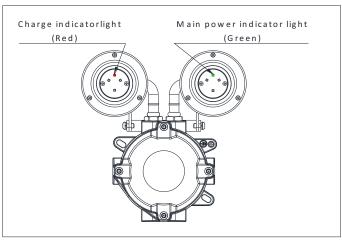
#### 5. Caution

- 5.1. This product should be installed and maintained by qualified electrician only.
- 5.2.Do not operate in ambient temperatures above those indicated on the nameplate.
- 5.3. Repair of the flameproof joint must be made in compliance with the structural specifications provided by the manufacturer.
- 5.4. Make sure the electrical power is OFF before making installation and maintenance. 5.5. Do not open when energized.
- 5.6. After de-energizing, delay 10 minutes before opening.
- 5.7.Battery should be recycled according to local battery disposal guide.
- 5.8.Typically full discharging and charging once every half a year.

5.9. The battery should be discharged to 50%~60% of it's rated capactly before shipment.

# 6.Functions and Status

#### 6.1.Structure Schematic Drawing

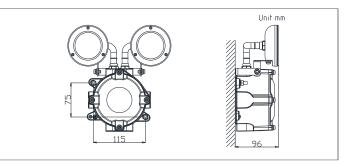


#### 6.2.Indicator light status explain

Indicator Light Mode	Туре		
Main power indicator light	power supply		
(Green): Turn on	is normal		
Main power indicator light	No AC power		
(Green): Turn off			
Charge indicatorlight (Red) :	charging status	When connected to the Mains supply,	
Turn on		lamp can automatically detects battery	
Charge indicatorlight(Red): Turn off	Battery full	power and decide whether to charge according to the power, charge curren and charge time, to charge the battery in the best way.	
Main power indicator light(Green)、 Charge indicatorlight(Red): Turn off	Emergency mode		

## 7.Installation method

7.1. This series products have Installation methods : Wall mount

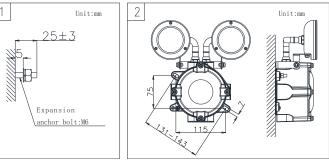


7.2.Select the right installation method as needed.make related M12 expansion anchor bolts according to different hole location.

7.3.Install the light with flat washer, lock washer and bolt nut to the expansion anchor bolts.

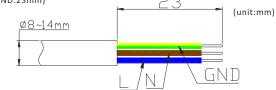
Installation steps:

Individual tips of each installation method:

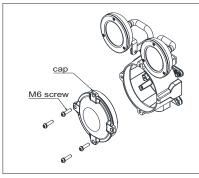


#### 7.4.Connect to power:

7.4.1.Use suitable three core cable(OD8-14mm)with stripping length (L:23mm,N: 23mm,GND:23mm)

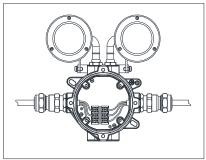


#### 7.4.2. Remove 4pcs M6 screws with hex wrench and open the side cover.

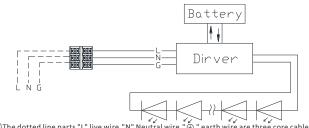


7.4.3.Remove the gland nut, loosen the screws and wire clips.

7.4.4. Put the cable through nut, flat washer, rubber seal and flat washer to the cable terminal.



7.4.5.Connect wire L and N to the right terminals, fix the ground wire to the Grounding mark in the terminal compartment.



① The dotted line parts "L" live wire, "N" Neutral wire, " " earth wire are three core cables already installed well.

(2) The solid line parts also well connected. if any failure, please check according to this drawing.

- 7.4.6. Fix the terminal compartment cover back and fasten the gland nut.
- 7.4.7.Connect the ground pole with screws as remarked, and fasten it.

7.4.8. Fix this luminaire in right place and connect to the AC power.

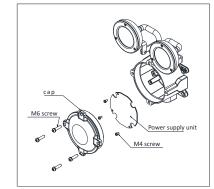
#### 8.Operation

8.1. After installation, the luminarie will work while connecting to AC power.

- 8.2.The main power switch of the lamp should be individually. by-pass any ordinary lamps or other electrical equipment control.
  - 8.3. The lamp uses nickel-cadmium batteries. Before using should charge lamps for about 20 hours, if the emergency lighting time is not up to standard requirement. The lamps should be fully charge and discharge three times to make the battery internal chemical substance to meet the requirements after activation.
  - 8.4. After each use, should recharge the battery. When the battery is discharged and unuse for a long time (for more than 5 days), then battery life will be affected if not replenish in time.
  - 8.5. If the lamp fails, it should repaired immediately. The defective lamps shall not be used.

#### 9.Maintenance

- 9.1Power supply replacement:
- 9.1.1.Loosen and remove the 4 piece of M6 screws with 4mm hex key and remove the head cover.
- 9.1.2.Loosen and remove 3 piece of screws of power supply with Cross screwdriver, take off the power supply, and replace a new power supply.
- 9.1.3.Solder the input and output cables to the new power supply and put it into the lighting fixture. Then fix the rear cover.



#### **10.Optional Parts**

NO.	Name	Qty/luminaire	Remark
1	Power Supply	1	Ac100~277V

#### **11.Malfunction Diagnosis and Correction**

Malfunction Diagnosis	Analysis	Correction	
	No power	Check the circuit	
5 11 × 1	Driver damaged	Replace LED driver in secure condition	
Fail to work	LED damaged	Repalce LED in secure condition	
	not work at emergency mood	ow battery	
Other problems		Contact service center	