ATEX LAMP

PL-AT800

ATEX II 2G Ex ib IIC T4 Gb
ATEX II 2D Ex ib IIC T150°C Db

INDEX

ATEXBEAM safety lamp is built in compliance with Directive 14/34/EU (Ex-Protection Directive). It is a self-contained lamp designed with LED technology for durable performance, power efficiency and structural robustness, and it is powered by wide thermal range Lithium battery.

The Portable rechargeable LED lamp type PL-AT800, is in compliance with standards EN 60079- 0:2012/A11:2013 and EN 60079-11:2012.

This equipment can be used in explosion gas atmosphere of IIC and explosion dust atmosphere of IIIC ,and the equipment protection level is Gb and Db.

ATEXBEAM is approved for use in the zones:
- II 2G Ex ib IIC T4 Gb
- II 2D Ex ib IIIC T150°C Db

ATEXBEAM Description

ATEXBEAM safety lamp is built with a high power LED and is fit by a light-weight, highly compact and high capacity Lithium Ion battery.

The enclosure of the lamp is made of industrial Polycarbonate resin with excellent impact strength. And it is anti-static, high heat resistance and has good structural stability. The strength and dimensional stability of polycarbonate resin are further enhanced with rugged design for tough work environment.

ATEXBEAM lamp is ergonomically operated with one switch that turns on/off light and to dim mode. The length of lighting time is increased when the power save mode is activated.

The direction of light beam is adjustable at various angles to meet the users' need.

ATEXBEAM PL-AT800 Features and Benefits

- Lighting time span:
  Up to 9 hours lighting time in high power mode and up to 20 hours in power saving mode

- Equipped with light-weight wide thermal range and high capacity Li-ion battery and it is capable of being recharged for 300 cycles

- Tough plastic enclosure, made of anti-static industrial resin, is capable of withstanding knock and impact

- Power Failure Mode:
  It has auto turn-on function in event of power outage

- Adjustable light beam for user to meet specific needs at various angles in working environment

- Robust tempered transparent glass

- Low battery capacity warning indication
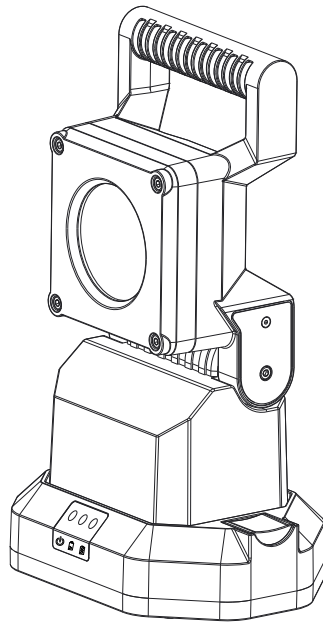
Anti-Static Body **High Impact Strength Industrial Resin** **High Capacity Li-ion Battery** **Swivelable Light Direction and Auto-Turn on in event of power failure**

ATEXBEAM PL-AT800 Enhanced Performance and Safety Features

Power Saving Mode

- The power saving feature is to reduce battery power consumption in order to maximise lighting time span.

  Pressing the switch twice from off position to activate power saving function (Dim mode) that outputs less light than the normal light (On mode).

- User may select the power saving mode to gain longer lighting time span when the battery capacity is running low and when user prefers less brightness.

- Maximising Battery Performance
  The built-in charging circuit monitors the charging processes and protects the battery from being overcharged and over-discharged. The regulated charging improves battery lifetime.

- Regular discharging and charging the lamp maximises the life span of the battery performance

power saving

Maximum Performance

Battery Safety Thermal Cut-Off
In event where battery temperature exceeds abnormal limit, the battery pack is safely disconnected and isolated.

The lamp shuts down for safety precaution.

Thermal Cut-Off

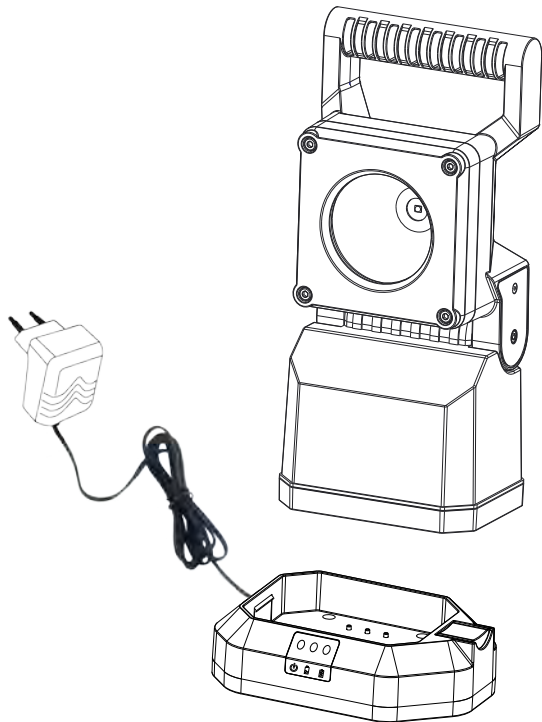**Getting Started with Operating Instructions**

Charging ATEXBEAM PL-AT800 Instruction:

Charging ATEXBEAM PL-AT800 must be carried out with the designated charging station and only in areas away from potential explosive atmosphere.

Plug the universal power adaptor into a 110Vac (US) or 230Vac (Europe) power outlet.

Connect the DC plug from the power adaptor to the DC socket of the charging station. The power on LED on front panel of charging station will light up. Place the lamp into the charging station, LED lights blink as charging process begins.

When all three LEDs light up and blinking stops, the lamp is fully charged

Lamp Operating Instructions:

ATEXBEAM PL-AT800 is operated with one soft silicon power switch located on the back of the lamp.

By pressing the switch, switching sequence cycles through three lighting modes as shown below:

Press the switch once: Light is on in Full Brightness Mode

Press the switch twice: Light is in Energy Saving Mode (Dimmed Light)

Press the switch three: Light is off

▷ ON
▷▷ DIM
▷▷▷ OFF

Power Failure Mode:
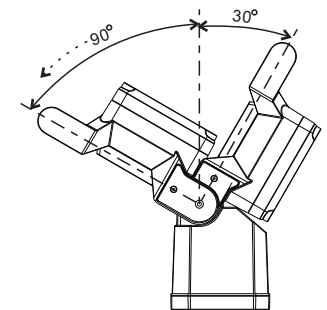Place ATEXBEAM PL-AT800 in the charging station.

Light turns on in event of power outage (light on when power fails during charging).

power failure

Adjusting angle and direction of light beam:
To adjust light beam at a desired angle, the lamp head can be swivelled at continuous angles from vertical 0° to 30° in the front and 90° to the back.

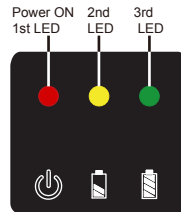90°   30°
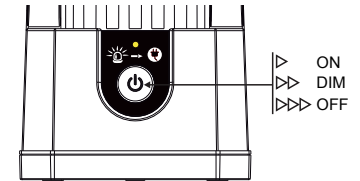
Operating Status Indications

Light Indication Of Charging Station:

1) Power ON LED (1st LED) :
The charging station is on when it is connected to the power-source. The 1st LED turns on.

Power ON   2nd   3rd
1st LED   LED   LED

2) LEDs Blink (1st, 2nd, 3rd LEDs):
The battery is being charged. Blinking LEDs indicate battery capacity level.

**3) All LEDs ON (1st, 2nd, 3rd LEDs) :**
The battery is fully charged

The LED Indication Of ATEXBEAM PL-AT800 Lamp:
(LED above the power switch shows the function status of lamp)

LED Flashes
Battery capacity low,
needs to be recharged

During charging process: The LED indication remains off.

Battery Low Status Indication:
In use when Red LED flashes rapidly to indicate there is opproximately one hour lighting time remaining before battery capacity is fullly discharged.
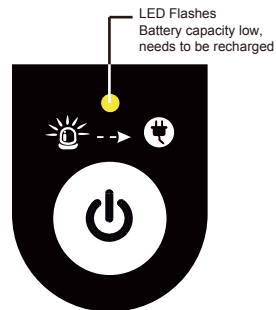
User Note:
If the battery is fully discharged, the LED light may not turn on.
Charge the lamp at regular interval to ensure optimum battery performance.

ATEXBEAM PL-AT800 Maintenance:

● Built-in battery is factory charged up to 30% in capacity when you buy ATEXBEAM PL-AT800 lamp.

● Keeping the lamp charged over continuous period of time, i.e. overnight, does not damage the battery or the lamp itself.

● When the lamp is not in use, always keep it in the charging station under charging.

● Clean the lamp with wet cloth. Only use diluted non-caustic detergent to clean the lamp.
  Do not use chemical solvent and oil based detergents.

30% charged in capacity

● Do not clean the lamp in water.

● Always keep the lamp away from hazardous area.

LED Module Replacements

● Step 1:
  Remove four screws ① and then the square front cover.

● Step 2:
  Remove three screws ② to free the the LED Module replacements.

● Step 3:
  Unplug the connection ③ of the the LED replacements.

③ ②

①
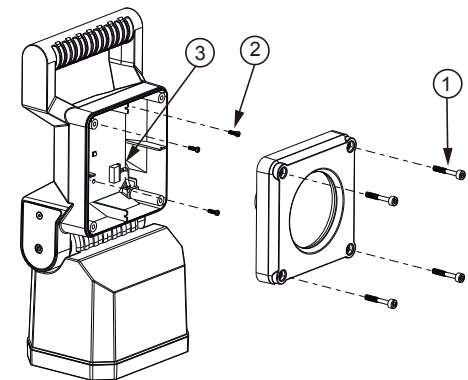
Electronic Module Replacement

- Step 1:
  Remove six rubber pads ① from the body cover

- Step 2:
  Remove six screws ② and then the body cover

- Step 3:
  Pull out the electronic module and unplug the
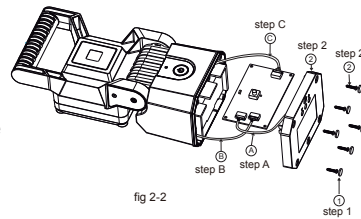 connections of step A / B / C

fig 2-2

Battery Pack Replacement

Before replacing battery pack, refer to and

observe strictly the precautions and warnings.

- Remove six rubber pads from the body cover.
  (Refer to fig 2-2 step 1)

- Remove six screws and then the body cover.
  (Refer to fig 2-2 step 2)

- Unplug the battery connction (refer to fig 2-2 step B)
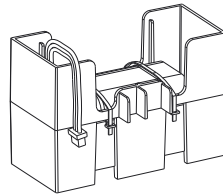 and remove the whole battery pack (fig 2-3).

fig 2-3

Product Specifications

Product Model	ATE**X**BEAM PL-AT800
ATEX Certification number	**TÜV 16 ATEX 7864 X**
Approval	II 2G Ex ib IIC T4 Gb II 2D Ex ib IIIC T150℃ Db
Equipment Category	2
Protection Type	ib intrinsic safety
Classification Area	Zone 1, 2 / Gas Group IIC Zone 21,22/Dust Group IIIC
Temperature Classification	T4(Gas)/T150℃(Dust)
Ambient Temperature	0℃ to +40℃
Enclosure Material	Industrial PC
Lens	Tempered glass
Beam Type	Floodlight
Light Source	1 X 3W High Power LED
Brightness	Approx. 275 lumens
LED Lifetime	30000 hours
Power Source	7.4V 5800mAh Li-ion Battery
Charging Cycle	300 cycles
Lighting Time	9 hours in full brightness / 20 hours in power-saving mode
Weight	1.065kg
Charger	12V 1000mA (adaptor)
Recharge Time(Empty to Full)	11 hours

In the package

- PL-AT800 ATEXBEAM LAMP
- CHARGING STATION
- UNIVERSAL POWER ADAPTOR
- USER MANUAL
- DECLARATION OF CONFORMITY
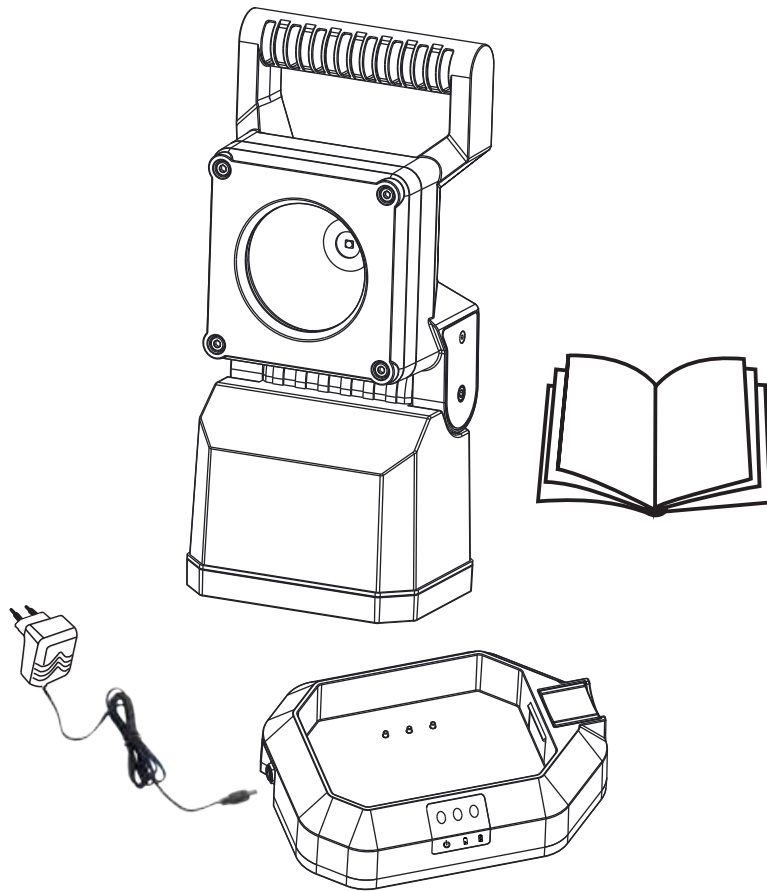
PRECAUTIONS AND WARNINGS

Safety use considerations:

1. This lamp shall be used with 12V approved designated adaptor.
2. Do not rub on the plastic enclosure of this lamp
3. This lamp must be protected from mechanical impacts. If damages occurred, the lamp must be removed from the hazardous area.

WARNING – DO NOT MAKE MODIFICATION ON THE LAMP AND REPLACE PARTS NOT SPECIFIED FOR ATEXBEAM LAMP.

WARNING – DO NOT CHARGE WITHIN POTENTIALLY EXPLOSIVE ENVIRONMENT

WARNING – AVOID STRONG ALKALINE SUBSTANCES AND SOLUTION.

WARNING – DO NOT DISMANTLE THE LAMP.IN ANY CIRCUMSTANCES. RETURN THE LAMP TO AUTHORISED SERVICE CENTER.

WARNING – ONLY AUTHORISED PERSONEL IS ALLOWED TO OPEN THE LAMP

WARNING – DO NOT SUBMERGE THE LAMP IN WATER.

WARNING – ONLY USE SPECIFIED ATEXBEAM CHARGER ADAPTOR AND CHARGING STATION FOR CHARGING ATEXBEAM LAMP

WARNING – DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT

WARNING – DO NOT OPEN WHEN ENERGIZED

WARNING – ONLY USE MANUFACTURER'S APPORVED BATTERY PACK FOR REPLACEMENT

WARRANTY

When ATEXBEAM lamp PL-AT800 is used under normal conditions and according to instructions in the user guide, the lamp is under warranty for 3 years period against manufacturing defect. The warranty period for battery and main lighting LED is 12 months from date of purchase.

Disclaimer:

The contents of the lamp cannot be altered or changed in any circumstances as this will void the warranty.

The product is strictly designed for Zone 1, 2, 21, 22.

The built-in battery pack is covered with only 12 months warranty from date of purchase and manufacturer will not be responsible for replacing the battery pack and the LED module.