GOALTEK

OPERATING INSTRUCTIONS

ExMP51R
Explosion-Proof Handlamp



SHENZHEN GOALTEK ELECTRIC CO., LTD.

PURPOSE OF THESE INSTRUCTIONS

◎ Working in hazardous areas, the safety of personnel and plant depends on complying with all relevant safety regulations.
◎ Staff working on assembly and maintenance therefore have a particular responsibility. It requires precise knowledge of the applicable standards and regulations.
◎ These instructions give a brief summary of the most important safety measures. It supplements the corresponding regulations which the staff must study.

SAFETY INSTRUCTIONS

◎ Use this series explosion-proof floodlight fittings only for its intended purpose.
◎ ExMP51R explosion-proof handlamp is not suitable for hazardous areas in Zone 0 or Zone 20 !
◎ Incorrect or impermissible use or non-compliance with these instructions invalidates our warranty provision.
◎ No changes to the device impairing its explosion-proof performance are permitted.
◎ Use the Explosion-Proof Handlamp only if they are clean and undamaged.
◎ Any damage can invalidate the Ex-performance.
◎ Observe the following during installation and operation:
- National safety regulations;
- National accident prevention regulations;
- Generally recognized technical regulations;
- Safety guidelines in these operating instructions;
- Characteristic values given on this Explosion-Proof Handlamp.

CONFORMITY TO STANDARDS

This Explosion-Proof Handlamp is designed, manufactured and tested in accordance with ISO 9001.
The Explosion-Proof Handlamp complies with the following regulations of ATEX DIRECTIVE 2014/34/EU and following standards:

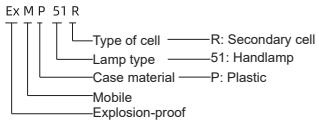
IEC 60079-0: 2017	EN IEC 60079-0: 2018
IEC 60079-11: 2011	EN 60079-11: 2012

APPLICABLE SCOPE

The Explosion-Proof Handlamp is widely used in oil mining, petrochemical, power grid, metallurgy, railway, subway, military industry, police, fire protection, water conservancy, manufacturing and other flammable and explosive indoor and outdoor dangerous places. It is designed to be used to use in all industrial areas and to provide specific portable lighting for patrol woks, inspection works, rescue operations, construction works, etc.

TECHNICAL DATA

◎ Model and implication

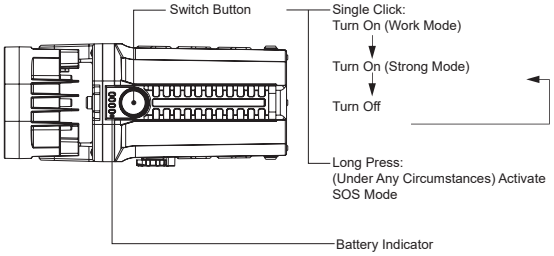


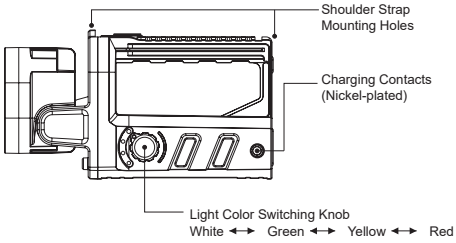
◎ Basic technical data:
- Ex mark: Ⓔx II 2 G D Ex ib IIC T4 Gb Ex ib IIIB T130°C Db
- Intended use: Class II Zone 1, 2, Class III Zone 21, 22
- Certificate: DNV 23 ATEX 96262X, IECEx DNV 23.0030X
- Degree of protection: IP66, IP67 (1m,30min)

- Ambient temperature : -20°C to +55°C
- Battery pack: Li-ion Rated voltage: 7.2V d.c., Rated capacity: 6700mAh, Um (for charging): 9V d.c.
- Battery pack life: ≥500 cycles
- Battery pack manufacturer: Shenzhen Goaltek Electric Co., Ltd.
- Charging method: Charging with 1000/01-B51 dedicated charger
- Charging time: ≤12h
- Charger input: DC:5V/24V; AC: 100-250V, 50/60 Hz;
- Luminous flux: Work mode (Constant): ≥210lm; Strong mode: ≥410lm
- Duration time: Work mode: ≥25h; Strong mode: ≥14h

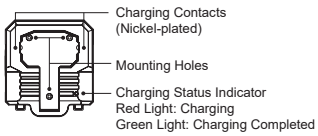
◎ Structure features:
- Intrinsically safe explosion-proof design, which can be safely used in explosive atmospheres Class II Zone 1, 2, Class III Zone 21, 22 and other professional occasions used mobile lightings.
- High-power LED light source, high light efficiency, long life, average service life up to 50,000 hours, long-term maintenance-free.
- High-energy lithium-ion battery, excellent charge and discharge performance, low self-discharge rate, no pollution.
- The battery has protection functions for overcharge, over-discharge or short circuit, which is safe and reliable.
- It has two lighting modes of working light and strong light, and can be switched with one button; Long press the button for 3s to realize the SOS alarm function.
- By turning the knob, you can choose three-color signal lights: green, yellow and red.
- By rotating the lamp head, the light beam angle can be adjusted.
- Intelligent power display and low voltage warning function design, you can check the battery level at any time; When the battery is insufficient, the power indicator light flashes to remind.
- Overvoltage charging protection function design, making the charging faster and safer.
- The shell adopts permanent antistatic, aging-resistant and corrosion-resistant high-strength alloy Nylon and with optimized structural design, which has the advantages of impact resistance, waterproof and dustproof, insulation and excellent corrosion resistance.
- Small size and light weight, can be used in many ways such as table placement, hand-held, shoulder strap, etc.
- Large button made of high-quality Nylon material, easy to operate with gloves, excellent wear-resistance and scratch-resistance, not be damaged for frequent and long-term use.

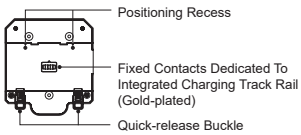
INSTRUCTIONS



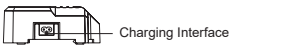


* Charging base is not included in the minimum order unit and needs to be purchased separately.











Swivelling head: 30° , 60°, 90°



With white lighting source and 3-color signal light source, switching by knob

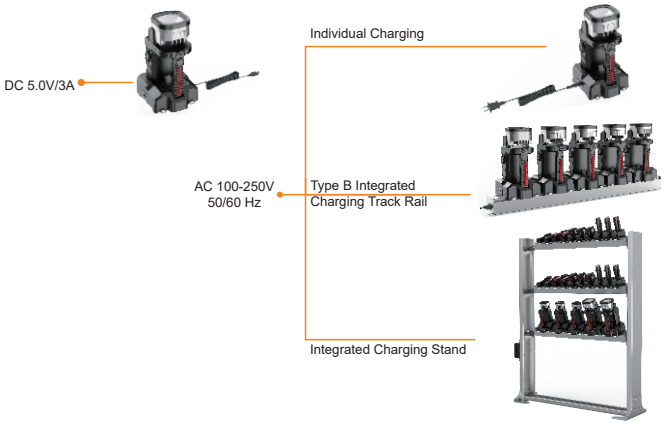


Big button design and battery indicator available

- The head of the light can be rotated within 90° according to the lighting requirements.
- Button switch:
  1. Lighting Mode: Rotate the knob switch to the white dot position on the knob label, press the button to turn on the working light; press the button again to switch to the strong light, press the button once more to turn off the light, and cycle through this process.
  2. Signal Light Mode: Press the button, rotate the knob to select green, yellow, or red signal lights on the knob label, press the button again to switch to the strong light, press the button again to turn off the light, and cycle through this process.
  3. SOS Mode: Long press the button for more than 2 seconds to activate the SOS alarm; press the button again to turn off the alarm light; In SOS alarm mode, rotate the knob to select the white lighting color, green, yellow, or red signal light color to meet different needs.
- Power Indicator: each grid representing 25% of the power. When all 4 grids are blue, indicating the power is ≥75% (3 blue grids light, indicating power ≥50%, 2 blue grids light, indicating power is ≥25%); when the lamp power display

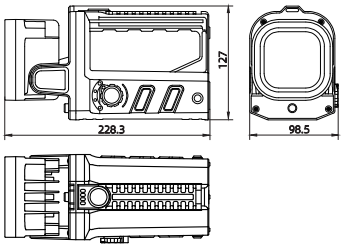
flashes, the battery power is about to run out, please charge the lamp promptly.

- Charging description: with 1000/01-B51 dedicated charging base
  The charging base has a charging indicator, red means charging, green means full power;
  During the charging process, the power indicator light of the lamp will flash;
  To judge whether the power of the lamp is full, please take the charging base indicator light as the standard.
- The charging base has 3 charging input ports: AC 100-250V/2A, DC 5.0V/3A and a dedicated integrated charging port at the bottom
- Optional B-type integrated charging bridge or integrated charging rack charging.
- The lamp should be charged timely after each use to ensure that the battery is always in a full power state.



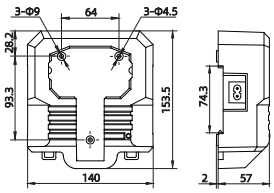
© Dimensions

- Handlamp dimensions



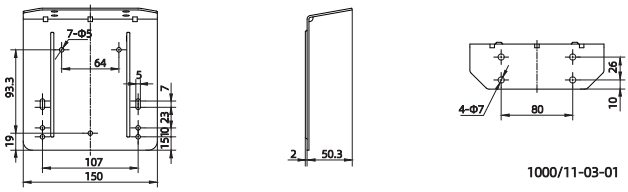
ExMP51R

- Charger dimensions



1000/01-B51

- Wall mount bracket for charger dimensions (1000/11-03-01)



1000/11-03-01

PRECAUTIONS

- Upon receiving, please inspect carefully for any product damage that may have occurred during transportation, such as scratches on the casing, cracks, broken glass and light sources.
- After unpacking the product, please check if all the accessories in the packaging box are complete.
- Keep away from heat sources and fire, and do not drop the battery.
- When disassembling and maintaining the lamp, it must be operated by a professional in a safe place, and non-professionals are strictly prohibited from repairing the lamp.
- When carrying and transporting the packaging, please ensure that the switch/button is not affected by external forces and prevent the switch/button from mis-operating.
- When the lamp is working continuously, a slight temperature rise on the surface is normal.
- Do not put it in strong acid or alkaline environment.
- The lamp should be off when charging.
- If the product has not been used for more than three months, battery maintenance is required. The battery should be fully discharged first, and then charged to complete a charge and discharge cycle.

SPECIFIC CONDITIONS OF USE

- Do not charge the product in hazardous location.
- The charger shall be SELV or PELV certified with output voltage of maximum 9V d.c..
- Do not disassemble the product or replace the battery pack in hazardous location.
- Use original battery provided by Goaltek company: 18650-2S2P-01.
- Use only the matching adapter, AC power cord, charging rail track, and charger provided by the Shenzhen Goaltek Electric Co., Ltd. Company; using other adapters, AC power cords, charging rail tracks, and charger for this product is strictly prohibited. Otherwise, it may cause battery damage, or even cause the battery combustion or explosion.

MAINTENANCE

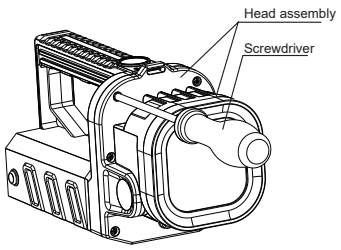
© The design, selection and installation of this product must strictly follow: EN 60079-14: 2014, IEC 60079-14: 2013 standard;
© The inspection and maintenance of this product must strictly follow: EN 60079-17: 2014, IEC 60079-17: 2013 standard;
© Strictly adheres to the control, inspection, and standard regulations of your country. Components that have a significant impact on explosion-proof performance must be carefully inspected. When disassembling or replacing components, first disconnect the battery pack wiring terminals from the drive board. All maintenance and repairs must use original components manufactured by Shenzhen Goaltek Electric Co., Ltd. and be carried out by professional, suitable, or qualified personnel.
© Any modifications or changes to the original design of this product are not allowed.
© If explosion-proof components are damaged, only replace them with the company's parts. If there are any questions about the malfunction, please consult the company or return the product for repair.
© When cleaning the lamp, please note that only a damp cloth should be used for wiping.
© Repairs /maintenance are strictly prohibited in potentially explosive environments.
© Battery and drive component replacement must only be performed in a safe location.

REPLACEMENT OF BATTERY PACK AND DRIVE COMPONENTS

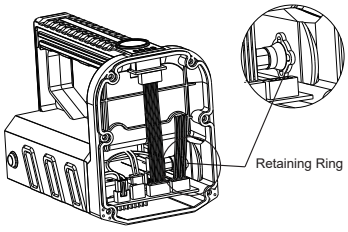
(Only operate in safety location)

- Repair Instructions:

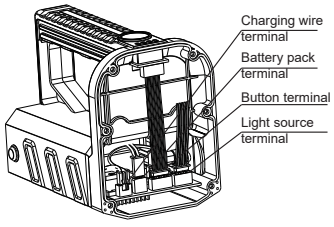
1) Battery pack replacement: replace according to the steps 1→2→3→4→5→6→7→8→9;
2) Drive component: Use intact drive component provided by Goaltek company, replace according to the steps 1→2→3→4→7→8→9;



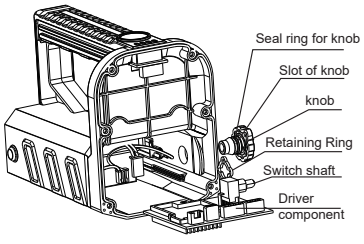
1. Loosen 6 screws with a cross screwdriver

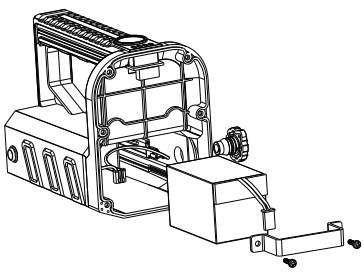


2. Remove the head assembly



3. Pull out 4 terminals in order





4. Use a small flat-head screwdriver to pry out the retaining ring, remove it, pull out the knob, and remove the drive component.
5. Loosen the 2 screws on the battery clip of the fixed battery pack with a cross screwdriver, remove the battery clip, and remove the old battery pack.
6. Install the new battery pack in the original position, then install the battery clip and tighten the 2 screws.
7. Install the functional and intact drive component in the original position. Insert the knob into the switch shaft, and the retaining ring should be inserted into the slot on the knob.
8. Insert the 4 terminals tightly in order, press the button to ensure that the light source is on.
9. Install the head assembly and tighten the 6 screws.

Note: When assembling, ensure that the seal ring of the knob and the O-ring seal of the lamp body are not damaged or fallen off.

TROUBLESHOOTING

- The handlamp fails to light:
  Cause: Low battery capacity or the handlamp is damaged.
  Solution: Press the button, check indicator light of battery capacity shines or not. If it does not shine, the battery capacity is low, charge the battery immediately. Or the handlamp is damaged, please contact our after-sale service personnel.
- The handlamp can not charged.
  Cause: The charging base and the lamp are not matched, or the contacts between the lamp and the charging base are not good.
  Solution: Check whether the charging base matches the lamp and whether the contacts between the lamp and the charging base are good.
  If the lamp has other malfunctions, please contact the company in time.

ACCESSORIES/SPARE PARTS

© Standard configuration table

Order Number	Explosion-proof Handlamp	Charger	Adapter	AC Power Cord	Shoulder Strap
ExMP51R	•	O	O	O	O
ExMP51 R+B51	•	•	•	•	•

- Indicates standard configuration
O: Indicates that it needs to be ordered separately
© Only original spare parts as well as original accessories made by Shenzhen Goaltek Electric Co., Ltd. can be used.

DISPOSAL/RECYCLING

The respective valid national regulations for disposal of waste shall be observed when disposing of apparatus!
We are pleased to answer any special questions you may have. Please contact your nearest Goaltek service station.

CHEMICAL COMPATIBILITY

This product involves the following non-metallic materials. Please consider the relevant chemical compatibility.
Plastic case of lamp -PA
Case of charger-PC+ABS
Sealing washer-Silicon rubber
O seal ring-Silicon rubber/fluororubber
Rotary switch-PA
Button-PA

TECHNICAL PARAMETERS

Product Model	Luminous Flux	Run Time	Charging Time	Beam Distance	Illuminance (1m/5m)	Central Intensity (1m)
ExMP51R	Work mode ≥210lm Strong mode ≥410lm	Work mode ≥25h Strong mode ≥14h	≤12h	Work mode ≥125m Strong mode ≥164m	Work mode ≥3900lx/150lx Strong mode ≥6660lx/300lx	Work mode ≥3900cd Strong mode ≥6660cd

* The above data was obtained under the testing conditions in the Goaltek laboratory environment.

DISCLAIMER

All information is collected under Goaltek laboratory conditions and the user must treat the given values as approximate. The above specifications are subject to change without notice, details of which are available upon request. If you have any other product related questions, please feel free to contact us.