

**Ex ia I IP67**

KC4S-Ex can be worn on the left or right side of your helmet. It also fits in the lamp bracket. A lamp bracket is provided as a standard accessory to attach the caplamp to the brim of any helmet.

KC4S-Ex uses a high capacity battery – 4AH and so generates a very high light intensity. This makes it very suitable for underground mines and rescue operations.

**LED lighting**  
**IP67 rated casing**  
**Charging banks or**  
**Individual chargers**  
**Multiple applications**  
**Maintenance free**

## OPERATIONS

**Main Mode:** For normal working operation, delivering good illumination in excess of 14 hours duration.

**High-Beam Mode:** Strong light beam for long distance projection, spotting, etc. Should only be used for short periods because the heavier battery drain shortens light duration in this Mode to around 8 hours.

**Auxiliary Mode:** Power saving for long operation and low level illumination.

**Off Mode:** The Caplamp is switched off.

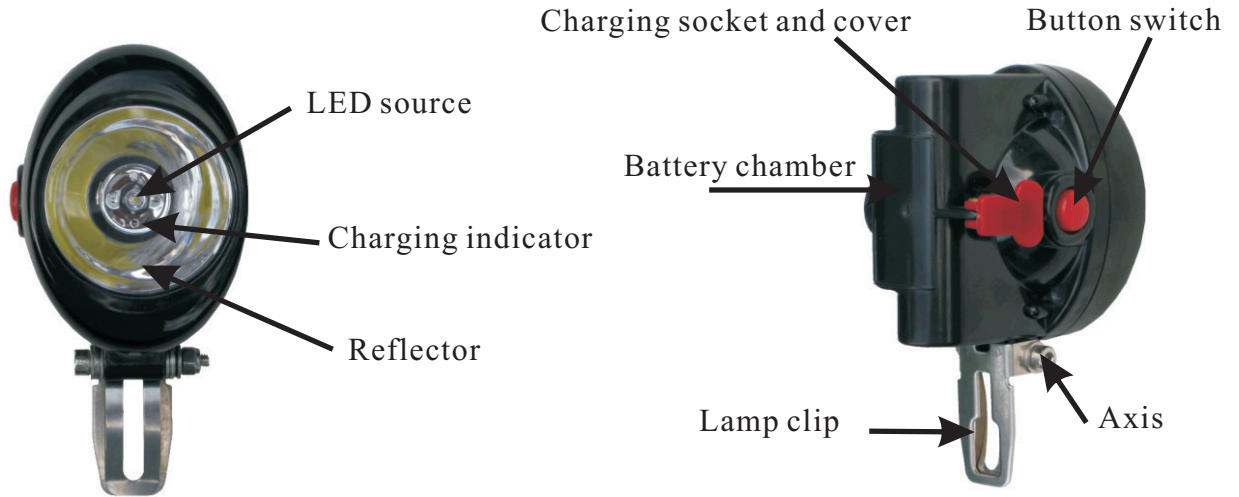
By toggling the operating button the Caplamp goes through: Auxiliary Mode > Main Mode > High-Beam Mode > Off Mode.

## FEATURES

- ▲ Very high aluminous intensity;
- ▲ Adjustable angle to point wherever you see, near or far ---- to read and write, repair equipment or check the ceiling, significantly reducing dead corners
- ▲ Multiple operating modes for different applications;
- ▲ Natural LED light for a comfortable light environment;
- ▲ IP67 housing with a fully integrated and sealed structure, and solid light source designed for the harshest underground mining environment;
- ▲ Extraordinary safety - no acid or any toxin to spill, no flammable materials exposed, no heat on lens surface, no danger for personnel at all;
- ▲ Various ways to wear, mount or attach for different applications, used as a caplamp, headlamp, torch or portable lamp;
- ▲ Easy to charge. Strong protection from over voltage, over current, over charge and over discharge;
- ▲ Various models of charging banks and single chargers available in different charging units and power input;
- ▲ Very low maintenance to significantly reduce your lamp room cost. Easy to clean; No cable, bulb and headpiece to check or change; No repairing; No dedicated staff to look after charging.



### STRUCTURE



### CHARGING FACILITIES

**Charging Banks:** Three models available to charge 8, 36 or 52 lamps together from different powers.

**Mains Charger:** Charge the lamp from a Mains outlet (*standard accessory in every package*)

**Vehicle Charger:** Charge the lamp from the cigarette lighter in a car or truck (12/24VDC).

### HOW TO USE

**Caplamp:** Worn on a side of a helmet or simply inserted in the lamp bracket on the helmet. The lamp clip is designed to fit in any Australian and American miner's helmet.

**Headlamp:** Worn on a plain hard cap using our *Cap Strap*, or worn on the head directly by removing 4 *Cap Hooks* on the *Cap Strap*.

**Mini-Torch:** Just hold in your hand, easily carried in a tool box, pocket or on your belt.

**Portable Lamp:** Clamped to an object or magnetically attached to a metal using our *Magnetic Lamp Bracket Clamp*, worn on the belt using our *Belt Worn Lamp Bracket*, or fixed to a location using our *Lamp Bracket*.

**Others:** Various accessories available for other ways to wear or mount the lamp, such as *Bar Bracket*, *Strap Bracket*, *Handle & Pocket Bracket*, *Tripod Bracket*, *Lanyard*, *Wrist Strap* and *Lamp Cluster*. Other accessories include, a handy *Mining Lanyard* to connect the lamp to your belt to prevent the helmet from falling away in such situations as in front of a ventilation machine, *Helmet Chin Strap* to hold your helmet in place in active situations.

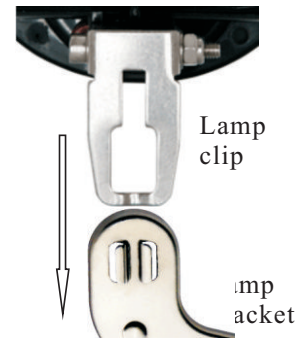




### SIDE-WEARING

#### Fit the caplamp to a side lamp bracket

There are two ways to mount the lamp on a helmet and there two side caplamp bracket available in every package. The lamp is fitted in either side lamp bracket in the same way as show in the figure. Simply align the slot of the caplamp clip to the bracket bar and plug the lamp in.



#### Fit the side lamp bracket to a helmet

Insert model of bracket, SLBI, can be inserted in a slot of a helmet. It is suitable for miner's helmet. Screw model of bracket, SLBS, can be screwed on the brim of the helmet. It is suitable for any other helmets.



#### Adjustable angle

The bracket is adjustable in horizontal direction to set a distance from the helmet so other attachments such as a visor will not block the light. The caplamp is also angle adjustable in the vertical direction to set the light projecting direction. Using the both bracket and lamp adjustments, an all-around angle is achieved.



### SPECIFICATIONS

Operating time:	14 hours (Main Mode)
Luminous intensity:	2000 cd (Main Mode)
Charging time:	8 hours
Battery:	4 AH, 3.7V
Battery lifetime:	80%C after 500 full charging cycles
LED lifetime:	30,000 hours
Weight:	165 g
Enclosure:	IP67
Warranty:	1year replacement

### CERTIFICATION

#### Intrinsically Safe



# IP67

**Ex Code: Ex ia I**

**Certificate #: IECEx TSA 10.0006X**

**ANZEx 10.3012X**