



ILUMINTECH®

USA: Patent No. 11,925,229 B2, CANADA: Patent Application No. 3,095,79, AUSTRALIA: Patent Application No. 2019436993 PENDING, CHILE: PI 63531

Safety Hard Hat with integrated 360° illumination and
smart emergency system

PRODUCT GUIDE

¡CAUTION!

Before using your safety hard hat, conduct a detailed inspection to detect any signs of damage or wear, such as cracks, fissures, deformations, stains, loss of flexibility, or frayed suspension threads, as well as any other signs of deterioration. Be sure to check all parts of the hard hat: the shell, straps, plastic suspension parts, sweat absorption band, and chin strap. **IF YOU OBSERVE ANY OF THESE SIGNS, STOP USING THE HARD HAT IMMEDIATELY AND REPLACE IT WITH A NEW ONE. USING DAMAGED HARD HATS CAN INCREASE THE RISK OF SERIOUS INJURIES OR DEATH.**

This hard hat provides LIMITED protection to the head from falling small objects that may impact the top of the hard hat. It does not provide protection against frontal, lateral, or rear impacts. Avoid contact with electrical cables. Never modify the shell or parts of the product. Prolonged exposure to direct sunlight can degrade the hard hat shell. Do not store the product exposed to sunlight.

FEATURES

ILLUMINTECH is an innovative technology that illuminates and secures the work environment, improving work quality, reducing the occurrence of errors, preventing fatigue, and enhancing communication. The system is equipped with a 360° light field, front and rear lights, side lights, and a rear position light. It also includes an intelligent emergency system that can be used to alert about an accident or any distant event through the use of colored lights and an audible alarm for the user.

OVERVIEW AND PARTS

This safety hard hat works in conjunction with a suspension system (included), which is detached to prevent damage during transportation. A chin strap is also included to secure the hard hat during work.

Single multifunction button

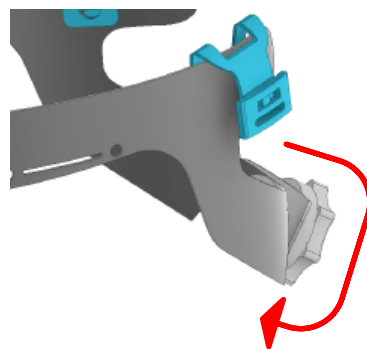
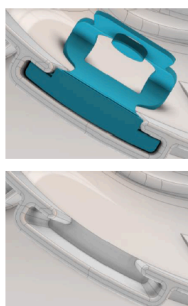
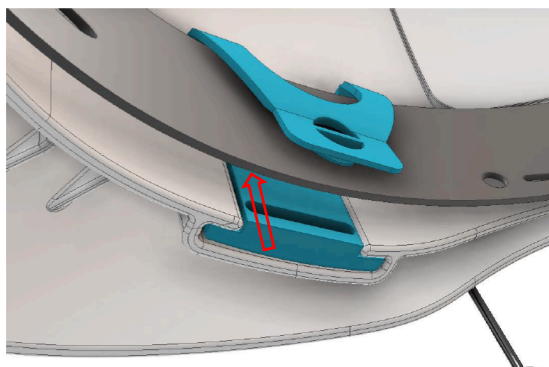
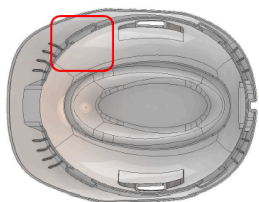


Harness mounting

Install the 4-point suspension harness by sliding and pushing it into the hard hat slot until it is secured and locked in place.

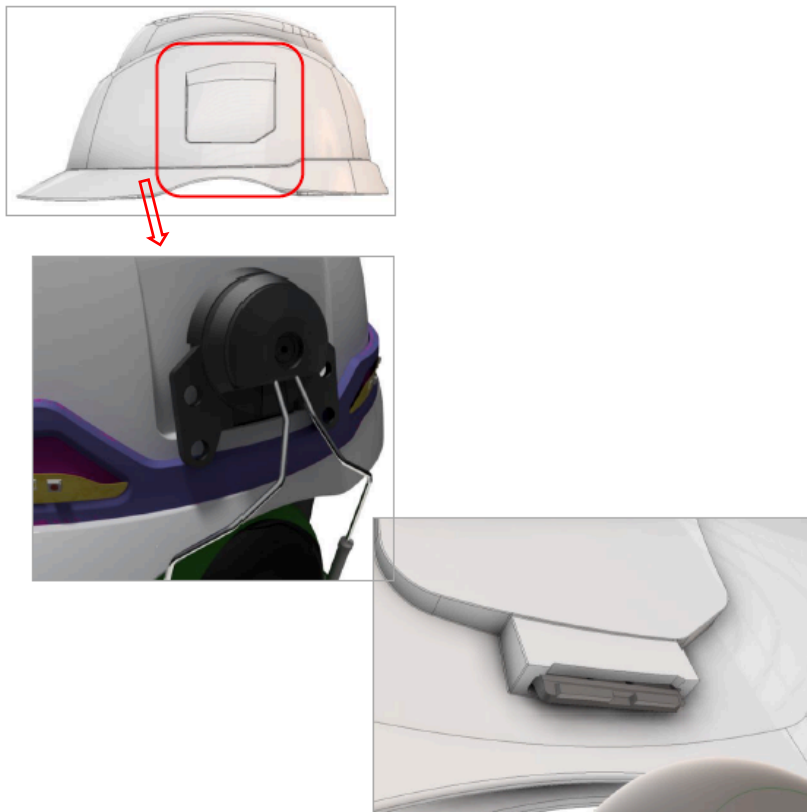
To adjust the harness, turn the rear rotary knob counterclockwise to open it to the maximum size. Then, adjust it clockwise once it is on for a proper fit.

THE HARD HAT MUST ALWAYS BE WORN WITH THE NECK STRAP BEHIND THE HEAD. IMPROPER USE CAN CAUSE SERIOUS INJURIES OR EVEN DEATH.



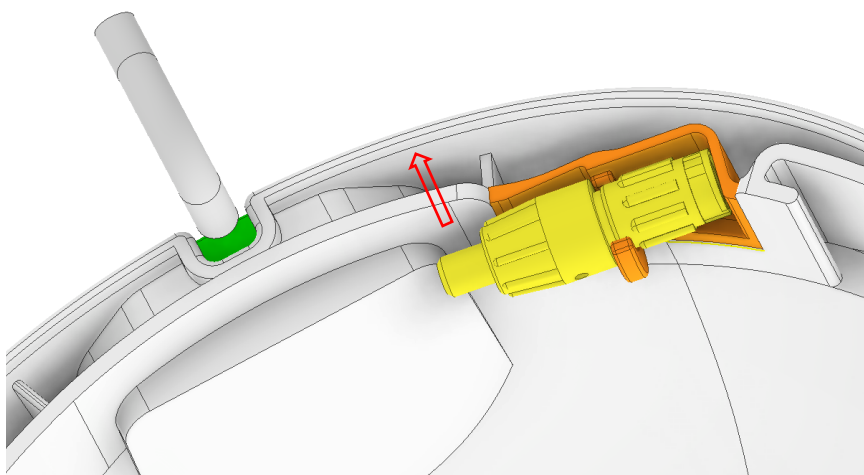
Multi brand earmuff mounting

Attach earmuffs by pushing its blade into slot on hardhat.



Connector guard

For transportation and storage or using the hardhat without light emitting system, store pigtail by clicking on back guard.



CHARGING

- Every battery pack should be charged for 12-24 hours before first use.
- After a working shift, the battery should be fully charged.
- Plug the battery wall charger into any standard electrical outlet that provides 110-220V.
- Plug the battery pack into the battery charger and check the light signal on the charger:
 - o Red Light: battery charging.
 - o Green light: battery fully charged.
- Once charging procedure terminated, disconnect battery from charger and charger from electrical source.
- The charger automatically switches off when the battery is completely charged.
- All lamps should be given a 24-hour boost charge at 6-monthly intervals until use, where they should again be fully charged before being placed into regular service.
- **WARNING:** The lamp should only be charged on ILUMINTECH approved chargers.

ACCESORIES INCLUDED

- External battery pack (1 unit included)
- Wall charger 120-240V (1 unit included)
- Car charger 12v (optional)
- Multi user charging stations (optional)

USING ILUMINTECH

Always inspect the product for proper functioning before use and charge. Connect battery pack cable with short pigtail cable at the back of the hard hat. Place battery pack in a pocket or place it on a belt with the metallic clip. It is recommended that the cable be tucked away to avoid it getting snagged by any object.

Temperature for an effective operation should be between 10-30°C.

Product should handled with care, it is composed by LED's, plastic parts and sensitive electronic parts. Product can be damaged if it is dropped, crushed thrown, punctured, burned, submerged in liquid or if it comes in contact with corrosive materials. Never use a damaged product as it may not function or may cause injury.

On, off and working modes selection can be selected by using single button located over front lamp. To **turn off** the lamp press and hold the button for 5 seconds and then disconnect battery pack.

- **Default mode** activated by clicking once. Full frontal light, 360° white lights and red back position light on.
- **Signal mode**: One click allows 20 seconds only frontal light and red back position light on for signal communication. Default mode will be turned automatically back or with one new click. 360° white lights off for this short period of time for underground or site light working signals.
- **SOS mode**: By pressing three quick clicks, turn on emergency mode, with frontal light on, 360° red lights and user audible alarm for alert. Just click one more time for turning SOS mode off and go back to default mode. This function can be automatically activated from smart emergency system caused of a high energy impact or quick altitude difference caused by falling.



Frontal light

360° lights

Back position light

SOS light

LOW BATTERY

- When battery is below 20%, only 360° lights will go into eco mode decreasing battery consumption.
- When battery is below 10%, Low Bat mode will be activated automatically turning off lateral lights keeping full frontal led on. Frontal light blink and alarm short beep will notify low bat status.

CLEANING

Before cleaning please ensure all batteries, and power sources are disconnected. Whip clean with a soft and dry cloth. Do not use any solvents, cleaning or chemical products, water or high-pressure hoses. Abrasive materials can scratch reflectors.

STORAGE

Ilumintech should be stored at ambient temperature 0-40°C, relative humidity of 45%. Store safety system in dry clean and well ventilated non-corrosive warehouse. Stay away from fire and heat. Storing out of temperature ranges can damage the product.

If long period storage, charge up to 80% of capacity. Charge before new use.

TECHNICAL SPECIFICATIONS *

- Easy single function button for on/off and modes selection.
- Battery pack capacity Li-ion: 3,7V / 12Ah
- Light duration: >12 hours
- Frontal light: >6.000 Lux
- Lateral/back light illumination: > 300 lumen in 360°
- International protection grade IP67, against dust and water (IEC 60529:2001)
- Hard Hat with light integrated system weight (with harness): 450 gr
- Charging time: 6 hours
- Charging cycles: > 1.000 times
- Certification: NCh 461.Of 2001, Type I Class A (Force transmission, penetration, flammability and electrical classification) and ANSI Z89.1 2009 Type1 Class E.
- 81 dB max audible user alarm for SOS mode

*All technical specifications and design can be modified

DISPOSAL

Product must be disposed of pursuant to local laws and regulations. Because product contains electronic components and lithium-ion battery it may need to be disposed separately from regular waste.

Product scraps should be centralized and managed by special department or recycled by the manufacturer.

WARRANTY AND SERVICE LIFE

ILLUMINTECH is manufactured with high-quality materials and elements resistant to wear and use, but it is not for indefinite use.

Regularly inspect your personal protective equipment before each use, and replace the entire system or any damaged part if necessary. Never take risks with your safety.

The suspension should be changed every 12 months of use. The hard hat should be replaced within no more than 5 years of use. If it receives an impact, the system must be replaced.

ILLUMINTECH disclaims all liability if the product has been used improperly or not as intended. The selection and use of the product are the sole responsibility of each operator. All liability claims, as well as all warranty claims, including the warranty offered by ILLUMINTECH for its product, are void in case of use or maintenance not in accordance with the instructions in this manual.

SUPPORT

For product Support please contact hello@illumintech.cl

Manufacturer reserves the rights to change content of this product guide without any previous notice.