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HL-85

5 Million Candlepower Handheld HL-85 Spotlight - 100 Watt - Spot/Flood Combo - 16' Cord

Product ID: 147

Please see last page for supporting documentation for this product(certificates, CAD files & drawings, IES files, wiring diagrams, etc).



Larson Electronics LLC manufactures a wide variety of products, including custom built to spec designs. The pictures displayed for this unit are a general representation of form factor for the product line and may not accurately represent this exact configuration in every detail due to custom builds and changes between similar products in our standard catalog. The specifics for this configuration are listed in the specification table and supporting documentation (CAD files, Dimensional Drawing, Name Plate Diagram, Wiring Diagram, etc.). This means that specific details (receptacles, plugs, wires, connections, mounting brackets, external finishes, etc.) may not be accurately represented in images vs specifications. Please review specifications and do not order based solely on images.

HL-85

Lamp Type: Halogen
Dimensions: 8" W x 9" H
Weight: 13 Ounces
Total Watts: 100 watts
Candlepower Rating: 5 Million CP
Lumens: 2100
Max Continuous Runtime: N/A
Temperature Rise: 25°F (handle), 40°F (lamp neck), 60°F (rear of reflector), 135°F (lamp lens)
Voltage: 12 or 24 Volts
Amps: 8.5 amps at 12 VDC, 4.25 amps at 24 volts
Wiring: 16 Foot Coil Cord

Features

Water Resistant
UV Resistant
Chemical Resistant

Special Orders - Special Requirements

Contact us for special requirements

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The HL-85 is a 100 Watt Halogen handheld spotlight that emits 1800 lumens. Its ideal applications would include recreational boating, fishing, hunting, search and rescue and security. This spotlight produces a beam capable of expanding to 900 feet. This lightweight, ultra rugged, ergonomic spotlight operates on 12 volts or 24 volts DC and can be used as a spot or flood light.
The handle and lamp housing support of the HL-85 are made from high impact nylon. The polycarbonate lamp housing is thick and contoured for extra support. The 16 gauge internal wiring and connectors are simple and well constructed. The industrial grade, tungsten filament bulb is designed for 1200 hours of life while producing over 5 million candlepower in this configuration. The impact resistant polycarbonate lens is

lightweight, shatter resistant and thermal resistant. The materials used in the construction of the HL-85 handheld spotlight are UV, water, impact and chemical resistant.



Click Photo to Enlarge



Click Photo to Enlarge



Click Photo to Enlarge

The reflector is uniquely shaped and shallow, capturing and focusing the light efficiently and effectively. Combined with a convex lens and inset lens positioning, this light optimally and efficiently captures and projects the right amount of light where the operator wants it. The position of the bulb and the shape of reflector are different than most handheld lighting products. The difference is in how much of the emitted light is captured and focused. In many ways, light shares the properties of water. With many spotlights, a great deal of the light "spills" on the ground around the light source. While a beam continues to project, much of the light "spills" out around the source, robbing the desired, projected beam of power. With the HL-85 spotlight configuration, 90% of the emitted light is captured and focused. A side benefit of this is a reduction of "casting", a phenomenon that occurs when the light "spills" around the light source. Often times, when surrounded by water, snow or other reflective surfaces, the light spillage will cause "casting" which effectively prevents the human eye from adjusting and seeing the objects at distance the spotlight was used to see.



Click Photo to Enlarge

The operator can lift the locking tab behind the lamp housing and rotate the lamp head. Rotating the housing enables the operator to adjust the beam from a wide, soft flood pattern to a tight, spot beam that goes out to 900 feet. Continued rotation to the extreme disconnects the lamp head from the handle assembly, enabling the operator to replace the bulb when necessary.

The HL-85 is an ultra-durable handheld spotlight that weighs only 13 ounces, which makes it easy to carry and operate. The unit is balanced for ergonomic comfort and handling. The handle is 4.5 inches long, 1.5 inches deep and 5/8 inch thick, making it easy to hold, even in wet, slippery conditions. The nylon handle has a no-slip textured surface to improve grip as well. The booted push button is conveniently placed so the user can easily access the switch with their fore finger for quick on/off action.

We have changed the wiring and the plug on the current model. Internally, we added 2 strain reliefs and a wire tie. Externally, we modified the coil cord setup. The previous coil cord had a multi-layer jacket. We have switched to a single SPT-2 jacket, bringing the cord all the way into the Deutsch plug terminals. This should prevent any failure issues that occur when the operator is compelled to stretch the cord beyond its limit.

A 3/8-16 inch brass nut fixture is imbedded in the base of the handle enabling the operator to mount a magnetic base, like our MM-2 or MM-5 to the light. Alternatively, the operator can tripod mount this light as well. It also comes equipped with a lanyard attachment at the top of the handle for users that want to secure the light in the event they lose their grip.

Each Larson Electronics spotlight comes with a detachable 16 foot coil cord with cigarette plug. The cord is detached via a weatherproof, 2 pin Deutsch connector which easily and securely attaches and detaches the coil cord from the spotlight. The plug contains a 15 amp fuse. Other cords are also available for purchase including a 21 foot

cord with ring terminals, 21 foot cord with spring battery clamps and 16 or 25 foot straight cord with a cigarette plug.
This spotlight can be configured to operate on 12 volts at 8.5 amps or 24 volts at 4.25 amps. This is done by using a 12 volt, H3 bulb or 24 volt, H# bulb. H3 replacement bulbs are readily available at any automotive store in the US. All consumer vehicles use 12 volts DC. Most military vehicles use 24 volts DC. There is no difference in light output, its only the matter of choosing the right voltage for your vehicle.



5 inch lens Click Photos to Enlarge 7 inch lens (Optional)

We also now offer a 5 inch diameter and a 7 inch diameter lens. Although the difference is not significant, the 5 inch lens produces a tighter spot beam while the 7 inch lens produces a wider coverage flood pattern.
Unlike cheaply made spotlights, the HL-85 has no continuous runtime limitations. The construction of the entire unit has been engineered allow for extended use.
Handle - 25°F temp rise
Lamp Neck - 40°F temp rise
Rear side of Reflector - 60°F temp rise
Reflector Lens - 135°F temp rise
The above temp rises were measured at a constant 95°F, not in a lab set at 72°F. The HL-85 was designed and tested for real world applications.
Note on Voltage: Most vehicles are 12 Volt DC. 24 Volts ***DOES NOT*** mean more power. Running a 24V light from a 12V power source will result in a very dim or non-functioning light, and may cause internal damage to the light as well. For common vehicle use, please order 12V.

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Frequently Asked Questions (FAQ)



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HL-85

Product ID: 147

Harmonized System (HS) Code: 8512.20.2080
Export Control Classification Number (ECCN): EAR99

Options:

HL-85-Voltage-Lens Size-Cord

Example: HL-85-12V-5-16CP.CC

Voltage	
12 VOLTS	-12V
24 VOLTS	-24V

Lens Size	
5	-5
7	-7

Cord	
16 CIG COIL	-16CP.CC
16 CIG	-16CP
21 RING TERMS	-21RT
16 BATT CLAMPS	-21BC
16 FLYING LEADS	-16.PIGTAIL

Links (Click on the below items to view):

- Catalog Page - Product Series
- Dimensional Drawing 2D
- DXF (2D CAD Model)
- Operations Manual
- SpecSheetArabic
- SpecSheetFrench
- SpecSheetSpanish
- STEP File (3D CAD Model)
- HigResPic1
- HigResPic2
- HigResPic3
- HigResPic4
- HigResPic5
- HigResPic6
- HigResPic7
- HigResPic8
- HigResPic9
- HigResPic10
- Video1
- ISO 9001 Certification
- Business Certificate
- Shipping Time Map