

Warnings

READ ALL WARNINGS BEFORE USING OR INSTALLING THE NIGHTRAY!

IMPORTANT! This light can cause fatalities if shined at a person operating a motor vehicle!
Some municipalities require work lights be covered while vehicle is driven.
Consult local laws before placing this light into operation!

DO NOT use light on road or highway. Intended for off-road use only.
DO NOT shine light into anyone's eyes, especially if operating a vehicle or other equipment.
DO NOT use light in explosive atmosphere. This device is NOT explosion proof!
DO NOT touch hot bulbs. Allow bulbs to cool before replacing.
DO NOT leave light face down on any surface during operation. Fire or surface damage may result.
DO NOT place arms or legs near the device when operating. Observe pinch points and keep clear.
DO NOT submerge the wireless remote key fob in water.
DO NOT attempt to service the NightRay. Return to K&H Industries, Inc. for repairs.

ONLY ELECTRONIC TECHNICIANS (QUALIFIED BY K&H INDUSTRIES, INC.) SHOULD ATTEMPT TO MAKE REPAIRS TO THE ELECTRONIC CIRCUITRY. IF PROPER TESTS AND REPAIR PROCEDURES ARE NOT FOLLOWED, DAMAGE MAY OCCUR, AND WILL VOID YOUR WARRANTY.

K&H INDUSTRIES, INC. ASSUMES NO LIABILITY FOR DAMAGES RESULTING FROM MISUSE OR ABUSE OF THIS PRODUCT.

Pre-Installation

The NightRay includes the following items:

- NightRay unit
- Wireless remote control key fob
- Adhesive backed mounting gasket
- 3 body mounting screws w/ nylon nuts
- Crimp terminals

Installation

Important! Be sure to read all of the installation procedures before beginning installation.

Attention: Care must be taken when selecting a mounting location to provide sufficient strength to support the light and access to the wiring.

NIGHTRAY BODY MOUNTING INSTRUCTIONS

1. Using the mounting template, (see NightRay Mounting Template, Page 4) drill three 3/32" dia. holes in the mounting surface. One 1/2" dia. hole should be drilled anywhere within the inner ring of template for the wiring harness.
2. Remove protective paper backing from the mounting gasket and adhere mounting gasket to bottom of light base.
WARNING: DO NOT USE CORROSIVE SEALERS (such as silicone sealant) on (or next to) the light base or mounting surface when mounting light. Proper installation of mounting gasket will prevent moisture from entering this area.
3. Insert wiring harness through the 1/2" dia. clearance hole. Secure light to mounting surface with the provided screws.

WIRING INSTRUCTIONS

1. String the yellow and black wires from the light to a battery power splice location.
2. Connect the **yellow wire** through the 15 amp fuse to battery **positive (+)**.
3. Connect the **black wire** to battery **negative (-)**.

Programming the Remote


To ensure each NightRay has an independent wireless remote, the key fob remote must be "matched" with the NightRay unit.


Please use the following steps to program the remote:

1. Disconnect power from the NightRay unit.
2. Press and hold any 2 buttons on the wireless remote key fob.
3. Restore power to the NightRay unit.
4. Release the buttons on the wireless remote key fob.


Use caution, as the wireless remote will now operate the (matched) NightRay unit.

Operation

Press and hold the  button (on the remote) for 2 seconds to turn the NightRay lamp on.

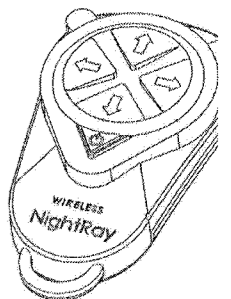
Once the NightRay lamp is on, pressing and releasing the  button quickly will toggle between spot and flood light modes.

Use the directional arrow buttons to move the NightRay beam up, down, left and right.

To turn the NightRay lamp off, press and hold the  button for 2 seconds.

Operating range for the wireless remote is 100'.

It is advisable to keep the vehicle's engine running while operating the NightRay for extended periods of time, to avoid draining the battery.



Maintenance

LAMP: If re-lamping is required, the sealed beam bulb can be removed by sliding a thin screw driver blade under the rim, near the exposed pin and carefully depressing and pushing the rim over the pin.

REMOTE: The installed lithium battery should last for many years of service, but may need to be replaced after extended use

1. Remove 4 screw on the back of the transmitter.
2. Carefully remove the circuit board from the housing.
3. Slide the installed battery out of the battery clip.
4. Slide in a new CR2032 battery.
5. Reinstall circuit board and screws.
6. Test operation.

Compliance Information

The NightRay remote control spotlight consists of a radio receiver and transmitter. This product has been registered with the Federal Communications Commission (FCC).

This product complies with standards in Part 15 of the FCC Rules. The standards are designed to provide reasonable protection against interference created by consumer devices. However, there is no guarantee that interference will not occur in a particular installation.

- This device may not cause harmful interferences.
- This device must accept any interference that may be received, including interference that may cause undesired operation.

Warranty

This product has a three-year limited warranty from any factory defects on parts and labor as per the **K&H Industries, Inc., Terms and Conditions of Sale** distributed with the product invoice. The separate warranty card should be filled out to avoid discrepancies in warranty information. Please contact K&H for warranty service (see "Contact" section) if required.

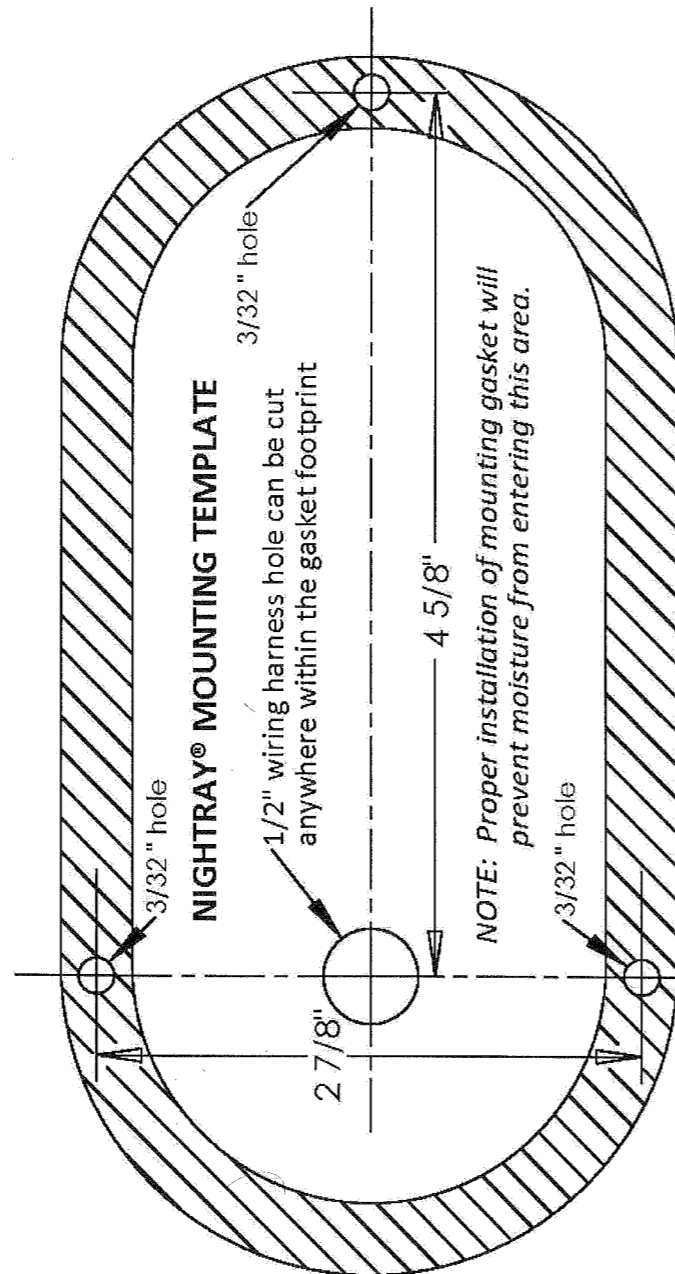
K&H INDUSTRIES, INC. ASSUMES NO LIABILITY FOR DAMAGES RESULTING FROM MISUSE OR ABUSE OF THIS PRODUCT.

Contact

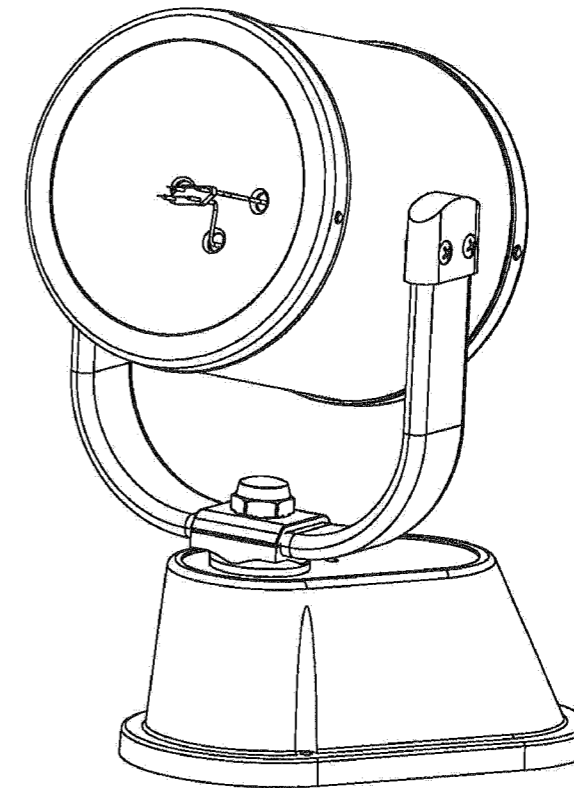
For questions, sales or service please contact:

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Mounting Template



KH K&H INDUSTRIES INC.
NightRay® with Wireless Remote
NR-475-20KFDS



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Introduction

Congratulations on the purchase of a new NightRay wireless remote control spotlight. The NightRay has been designed for use in adverse environmental conditions with all materials being corrosion resistant. A "slip drive" protects the drive unit from damage should manual positioning of the light be required. A wireless key-fob controls the spot-flood combination bulb, including toggling between spot and flood, and vertical-horizontal movement of the beam. With normal care this light will give many years of service. NightRay is manufactured to exacting standards for performance, convenience, and reliable service. Please read all of the warnings before using or installing the NightRay.