

Trim Tab Lights HID Series

Features:

- The housing is made of polyvinyl chloride (pvc) a tough, chemically resistant synthetic resin .
- Front access allowing bulb replacement.
- Specially designed watertight cable glands and gaskets.
- Installation is simple and user friendly.

Installation:

Warning: The following instructions contain important safety information and should be followed carefully. Failure to do so may result in injury and will void warranty.

- Install your lights by removing the screws on the bottom of each trim tab ram (Bennett), insert bracket and tighten screws.
- Ensure your tabs are completely in the down position when installing to allow for ample cord length.
- Before proceeding to drill the above waterline wire holes, 3/8 drill bit, check carefully to ensure that it will not affect the operation of other equipment in close proximity, nor compromise the integrity of the structure.
- Before drilling the holes mark the position. It is good practice to use tape on the surface to be drilled then drill the hole through the tape. This will avoid scratching/chipping of the surrounding surface.
- After drilling the holes, apply a marine grade sealant to the cut surface to ensure it is completely sealed against the ingress of moisture between lamination. Clean any excess sealant from all surfaces. Allow sealant to cure.
- Fit wiring. Use either cable clams and/or apply a marine grade sealant to fill the holes to ensure it is completely sealed against water intrusion.
- Use wire ties to secure wire up the tab rams. Ensure cables will not chafe or kink during trim tab operation. Wire loom can be used for barnacle, musk rat, etc. protection.

Wiring and Connections:

- All wiring must be carried out by a suitably trained /qualified electrician. With low voltage DC wiring the risk of fire may be present if wiring is not correctly installed.
- Ensure power supply wiring is of the correct size for the current draw. (*See Wire Recommendation Chart*). Consult with a qualified electrician.
- Ensure electrical supply has suitably sized fuse or other protective device to provide adequate protection of wiring and connected equipment in the event of circuit fault or short circuit.
- Your lights can be wired individually or in a group. The positive colors are Red & White, the negative side are Black & Green of the power cord. **DO NOT CROSS WIRES** as this will blow the ballast and void warranty.
- Use only approved marine grade water-tight connectors and wire. All joints must be above the waterline, soldered and sealed with a proprietary compound filled heat shrink tube. *Ensure wire harness will not chafe or kink during operation.*

WARNING:

- *Do not* use as a step.
- *Do not* operate lights out of water. However, your lights can be turned on for 1 minute or less during installation to insure that your wiring is correctly configured. Failing to adhere to this may see excessive temperature build up in the fixture resulting in damage.
- Dismantling of housing cover, wire glands, etc. voids warranty.
- Be sure the inside of the housing is *dry* before re-fitting lamp and cover.
- Your Lights and Brackets can be painted with your bottom paint to prevent growth. For extra protection to your wire harness, we suggest using cable loom over the submerged cable.
- *Do not* use silicone sealant on soldered joints as the acid in silicone will attack joints resulting in eventual failure.
- *Do not* use electrical tape to insulate soldered inline joints.

Maintenance:

- Ensure the lens is kept clean at all times, do not use abrasive or sharp objects to clean the housings and glass lens.
- Failing to do so will result in excessive heat build up and poor light performance.
- Carry out regular checks of wiring and connectors to ensure they are secure.
- When changing lamps observe the following:
 - Light(s) must be *out of the water* to perform maintenance.
 - Ensure the **power is OFF** and the lamp has had sufficient time to cool down.
 - Ensure the new lamp is fitted correctly into the housing and the housing is clean and dry. Do not touch bulb.



LIMITED WARRANTY AND LIMITATION OF LIABILITY

All new products manufactured and marketed under Hurley Marine, Inc., are warranted to be free from defects in material and workmanship under normal and proper use for a period of (1) one year from date of shipment from Hurley Marine, Inc. No claim for breach of warranty will be allowed unless the material of workmanship is found defect within the warranty period, properly documented by buyer and Hurley Marine, Inc. is notified in writing within 10 days from failure. This warranty shall not apply to products that have been disassembled, altered, or utilized in a manner not approved by Hurley Marine, Inc. or subjected to abuse, misuse, improper maintenance, negligence or accident.

CUSTOMER AGREES THAT USE OF THE SERVICE IS ENTIRELY AT CUSTOMER'S OWN RISK. THE FOREGOING WARRANTIES ARE EXCLUSIVE AND ARE ACCEPTED BY BUYER IN LIEU OF ANY AND ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING WITHOUT LIMITATION THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE. Buyer's sole remedy in the event of a breach of the forgoing warranties is the repair or replacement of the affected product by Hurley Marine, Inc., upon the return of the product transportation charges prepaid to Hurley Marine, Inc., and after a charge to buyer for the use of the product prior to its return. BUYER AGREES THAT IN NO EVENT WILL HURLEY MARINE, INC'S LIABILITY FOR ALL LOSSES FROM ANY CAUSE, WHETHER BASED ON CONTRACT, NEGLIGENCE, STRICT LIABILITY, OTHER TORT OR OTHERWISE, EXCEED BUYER'S NET PURCHASE PRICE, NOR WILL HURLEY MARINE, INC, BE LIABLE FOR ANY SPECIAL, INCIDENTAL CONSEQUENTIAL OR EXEMPLARY DAMAGES.

The foregoing warranties will continue in effect for so long as the product is serviced and maintained in accordance with Hurley Marine, Inc. instructions and with genuine Hurley Marine, Inc. manufactured replacement parts. These warranties may not be altered or amended except by a written instrument signed by buyer and a duly authorized officer of Hurley Marine, Inc. For warranty or service assistance contact your Hurley Marine, Inc. dealer. Be sure to register your product at: http://www.hurleymarine.com/Product_Reg_Form.html

TERMS OF SALE / SHIPPING

RETURN POLICY: If you are dissatisfied with your purchase, contact us within 30 days from the date of product purchase. Products returned within 30 days of their receipt, unopened in their original packaging and otherwise in new condition will automatically be exchanged or refunded. A minimum fee of 25% of the price of the product will be charged for inspection, repacking and restocking for items not returned in their original condition. Other fees may apply depending upon the condition of the item. Products are not returnable after 30 days.

EXCHANGE / REFUND PROCEDURE:

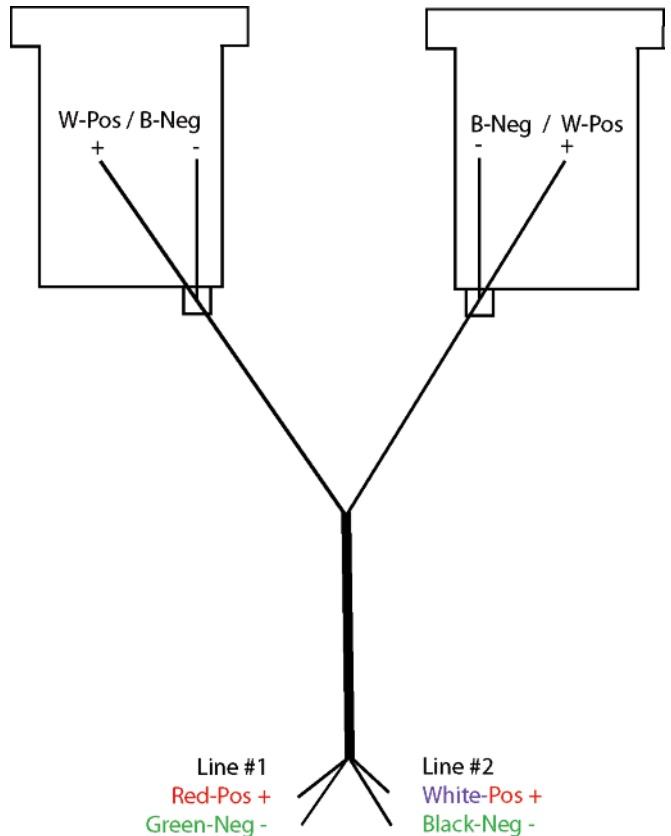
- All returns must have a Return Authorization number. Contact place of purchase for a Return Authorization number.
- Properly repack the product in the original packaging and place inside a box suitable for shipping with all the original enclosures, parts, and accessories.
- The Return Authorization number must be on the box next to the shipping address.
- Return it with **original receipt** and postage pre-paid (we do not accept C.O.D.), add appropriate insurance.
- Shipping and packing fees are non-refundable.

Non-Returnable items: Inflatable boats, installed/mounted items, damaged goods, clearance/discount items, used and/or display items, electrical goods, light bulbs and special ordered items are not returnable, unless defective, and then for repair/replacement only. If the product is defective you must call Hurley Marine, Inc. within 10 days of receipt of the product.

DAMAGES GOODS: We thoroughly inspect all items prior to shipment. We suggest that you also thoroughly inspect the item(s) before accepting delivery. If damage is apparent, refuse delivery or if your parcel is left without a signature and damage is found contact the carrier immediately. Do not discard the box or any packaging materials. Most claims must be filed with the carrier within 10 days of receipt of delivery. Although we take special care to ensure the safe arrival of your merchandise, our responsibility for damage ends when the carrier accepts shipment.

12v/24v DC WIRING SCHEMATIC FOR HURLEY HID TAB LIGHTS AS OF 12/01/09

WARNING!! ALL WIRING MUST BE CARRIED OUT BY A SUITABLY TRAINED / QUALIFIED ELECTRICIAN. FAILURE TO COMPLY MAY RESULT IN DAMAGE TO COMPONENTS AND/OR PERSONAL INJURY AND WILL VOID WARRANTY.



Rated input voltage:	12v - 35w & 55w
Input start-up current 35w:	DC13.5V (6~18V normal work)
Input start-up current 55w:	<6.0A (cool boot)/<4.0A(hot boot)
Stable input current 35w:	<7.0A (cool boot)/<5.0A(hot boot)
Stable input current 55w:	3.0A (input 13.5 V DC)
Input high voltage recurrent point:	4.5A (input 13.5 V DC)
	17±0.5V
Rated output voltage:	85V AC (60~160V AC)
Output frequency:	400 Hz
Instant Start-up Voltage:	23KV
output short circuit protection:	Auto
output open circuit protection:	Auto

WARNING:

- Be sure NOT to cross the Negative and Positive leads when wiring, this can cause damage.
- Never operate lights out of water as the water provides necessary cooling. Avoid operating the light when the boat is planning as often times this raises the fixture above the water-line and thus diminishing the cooling effect of the water. In addition, this can effect night time navigating of others with false effects of lights.
- HID bulbs take time to warm up and reach full brightness in about 2 minutes. When the light has been running and switched off it may not restart immediately, it may need to cool down before re-striking. This can take up to 10 minutes.
- Lamps generally have a service life of approximately 4,000-5,000 hours. This may vary depending on the number of restarts and other factors. **BULBS ARE NOT COVERED UNDER WARRANTY.**

IMPORTANT!

- Ensure the new lamp is wiped totally clean of any dirt or fingerprints. Failure to do so will result in premature lamp burn-out.
- Ensure power cables will not chafe or kink during trim tab operation. Cables should go behind ram in most cases.

Under no circumstances is Hurley Marine, Inc. responsible for reimbursement of expenses related to vessel haul-outs, technician or yard personnel travel expenses, yacht storage, labor performed during removal and/or replacement of fixture, or expedited shipping costs for replacement parts. These are assumed liabilities of the customer and part of the terms of sale between Hurley Marine, Inc. and its customer.

~ Wire Size Recommendations ~

Conductor Sizes (Gauge) for 3% Voltage Drop - 12 VOLTS

Length of conductor from source of current to the product and back to the source - in feet

Total Current on Circuit	10'	15'	20'	25'	30'	40'	50'	60'	70'	80'	90'	100'
5 amps	18	16	14	12	12	10	10	10	8	8	8	6
10 amps	14	12	10	10	10	8	6	6	6	6	4	4
15 amps	12	10	10	10	10	6	6	6	4	4	2	2
20 amps	10	10	8	6	6	6	4	4	2	2	2	2
25 amps	10	8	6	6	6	4	4	2	2	2	1	1

Conductor Sizes (Gauge) for 10% Voltage Drop - 12 VOLTS

Length of conductor from source of current to the product and back to the source - in feet

Total Current on Circuit	10'	15'	20'	25'	30'	40'	50'	60'	70'	80'	90'	100'
5 amps	18	18	18	18	18	16	16	14	14	14	12	12
10 amps	18	18	16	16	14	14	12	12	10	10	10	10
15 amps	18	16	14	14	12	12	10	10	8	8	8	8
20 amps	16	14	14	12	12	10	10	8	8	8	6	6
25 amps	16	14	12	12	10	10	8	8	6	6	6	6

Conductor Sizes (Gauge) for 3% Voltage Drop - 24 VOLTS

Length of conductor from source of current to the product and back to the source - in feet

Total Current on Circuit	10'	15'	20'	25'	30'	40'	50'	60'	70'	80'	90'	100'
5 amps	18	18	18	16	16	14	12	12	12	10	10	10
10 amps	18	16	14	12	12	10	10	10	8	8	8	6
15 amps	18	14	12	12	10	10	8	8	6	6	6	6
20 amps	14	12	10	10	10	8	6	6	6	6	4	4
25 amps	12	12	10	10	8	6	6	6	4	4	4	4

Conductor Sizes (Gauge) for 10% Voltage Drop - 24 VOLTS

Length of conductor from source of current to the product and back to the source - in feet

Total Current on Circuit	10'	15'	20'	25'	30'	40'	50'	60'	70'	80'	90'	100'
5 amps	18	18	18	18	18	18	18	18	16	16	16	16
10 amps	18	18	18	18	18	16	16	14	14	14	12	12
15 amps	18	18	18	16	16	14	14	12	12	12	10	10
20 amps	18	18	16	16	14	14	12	12	10	10	10	10
25 amps	18	16	16	14	14	12	12	10	10	10	8	8