USER INSTRUCTIONS

HTX2 HYBRID DRIVING LIGHT.



KIT CONTENTS

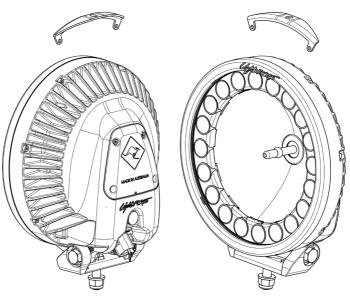
- 1 x 230mm HTX2 Hybrid Driving light
- 1 x Spot filter (fitted to light)
- 1 x Reversible mounting bracket (fitted loose to light)
- 2 x M10 x 35mm stainless steel hex bolts with washers and Nyloc[®] nuts (side bolts fitted to light)
- 1 x M10 x 35mm stainless steel hex bolt with washer and Nyloc® nut (fitted to bracket for mounting)
- 1 x 4-pin waterproof harness adaptor
- 2 x M6 x 30mm stainless steel hex bolts with washers and nuts (in bag) for optional extra mounting security (see note on Page 4)
- 1 x Xtreme Top Stay Bracket (24V versions only)
- 1 x User instructions

XTREME TOP STAY BRACKET (HTXMK2TSB)

Optional Xtreme Top Stay Bracket is supplied as standard with 24V version.

TOOLS REQUIRED

- 17mm and 11mm socket on ratchet
- Torque wrench (recommended).



NOTE

Drawing shown is with filter removed.

GENERAL CARE AND SAFETY TIPS

To wash your lights, use plenty of warm soapy water and a soft cloth only (this prevents surfaces from marking). Never use any solvent based cleaners or industrial detergents when cleaning these lights. Handle the base of the bulb only, if the glass gets dirty then clean with isopropyl alcohol or methylated spirits.

WARNING

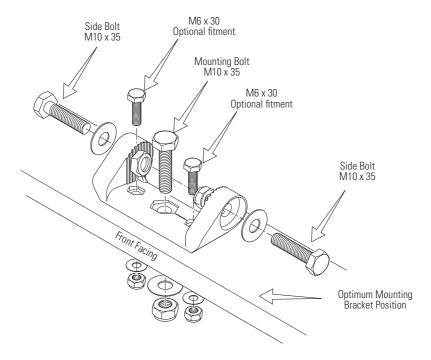
High intensity light source. Do not look directly into the light during operation, eye injury may result.

IMPORTANT NOTES

- Mounting points vary in design and load capacity. Ensure the light is within the manufacturer's recommended weight specifications before fitment
- 2. Before fitting the stainless steel hardware, it is recommended that you apply a small amount of anti-seize to the thread of the 35mm mounting bolts
- The optional Xtreme Top Stay Bracket (HTXMK2TSB) provides additional stability during extreme driving conditions (included with 24V version only).

MOUNTING BRACKET

- 1. Remove Nyloc® nut and M10 washer from M10 x 35mm bolt attached to the bottom of mounting bracket
- 2. Locate the bracket in a suitable position using the M10 x 35mm bolt. It is recommended that the base area of the mounting bracket is totally supported
- 3. Align the light to the preferred driving position
- 4. Fit the washer and M10 Nyloc® nut then tighten using a 17mm socket and ratchet to specified torque (35Nm) do not use a rattle gun
- 5. Tighten 2 x M10 x 35mm side bolts to the recommended torque (35Nm).



NOTE

Additional mounting bolts are provided - If extra mounting security is required or you have a problem with your light rotating, there are two mounting holes either side of the main M10 mounting bolt that can be utilised. Also the optional Xtreme Top Stay Bracket provides additional stability during tough terrain.

ELECTRICAL CONNECTIONS

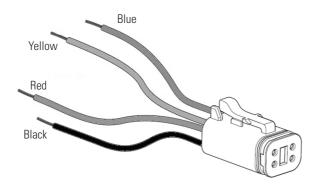
The HTX2 Hybrid Driving Light is fitted with a waterproof 4 pin electrical connector.

The mating connector included in the kit is fitted with short lengths of cable for integration with an appropriate wiring harness. **NOTE:** Harness must be capable of 15A per light.

If the vehicle's existing wiring harness is suitable, the included connector needs to be fitted directly to your existing driving light circuit.

CONNECTOR WIRE COLOUR IDENTIFICATION

- 1. **Red:** Positive input for HID connect to positive output (87) wire on relay
- 2. Black: Negative for HID connect to negative (earth)
- 3. **Yellow:** Positive input for LED connect to positive output (87) wire on second relay
- 4. **Blue:** Negative for LED connect to negative (earth).



NOTE

For maximum performance, three mode operation and safety we recommend the use of the optional wiring harness (part number LFDLHDS) to fit the 12V version of the HTX2 to a vehicle – for fitment follow the installation instructions included with the harness.

The 24V version of the HTX2 is commonly installed on various commercial vehicles and the use of a customised harness is usually required.

Once all the electrical connections have been made, align the light to the desired position and tighten all bolts as per recommended torque specifications (see specifications section).

CAUTION

Improper installation of the connector will affect the reliability and operation of your lights.

TECHNICAL SPECIFICATIONS

LED power: 80W

HID power: 50W

Effective lumens: 8050

Input voltage range: 10-16V DC (12V version)
 Current draw: 11.5A @ 13.2V (12V version)

• Input voltage range: 18-30V DC (24V version)

• Current draw: 6A @ 24V (24V version)

LED colour temperature: 5000K

- HID colour temperature: 5000K
- LED lifespan: Up to 50,000 hours
- Operating temperature: -40°C to 63°C (-40°F to 145°F)
- Dimensions: 230mm (9.06") W x 250mm (9.86") H x 122mm (4.80") D
- Weight including bracket: 2.3kg (5.07lb).

CERTIFICATIONS

- IP68 and IP69K rated to protect against moisture / contaminant ingress
- CE Certified. The CE mark is an internationally recognised symbol declaring that the product complies with stringent health, safety and environmental standards. Compliance limits electromagnetic emissions such that the product does not affect radio reception and telecommunications.

RECOMMENDED WIRE SIZE

• 0.82mm² (AWG 18) minimum per circuit.

FASTENER TORQUE SPECIFICATIONS

- M10 x 35mm bottom mount bolt 35Nm (26lb-ft)
- M4 x 10mm Rear cover 2.5Nm (1.84lb-ft)
- M6 x 30mm additional bottom mounting bolts 4Nm (2.95lb-ft).

ACCESSORIES

ORDER CODE	DESCRIPTION
LFDLHDS	HTX / HTX2 dual switching dual relay harness (12V only)
HTXM2TSB	HTX2 Xtreme Top Stay Bracket - (not compatible with original HTX)
HTXMK2SFL	HTX2 spot filter - (not compatible with original HTX)
HTXMK2CFL	HTX2 combo filter - (not compatible with original HTX)
HTXMK2BC	HTX2 black cover - (not compatible with original HTX)
ATNSG2	Anti-theft nut kit - (not compatible with original HTX)
GL30	HID replacement 5000K bulb - (not compatible with original HTX)
DL230MB	HTX / HTX2 replacement mounting kit



ELECTRICAL SHOCK

WARNING

ALWAYS disconnect power before disassembly of light.

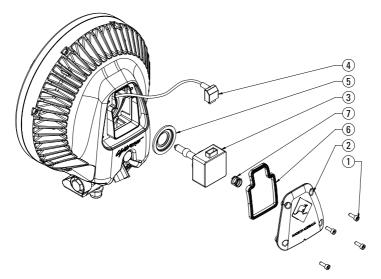
ALWAYS wear safety glasses when handling any bulb.

DO NOT handle the glass section of the bulb.

NOTE: Wearing clean cotton gloves is recommended while handling internal components.

HID BULB REPLACEMENT

- 1. Disconnect power and remove the light from vehicle
- 2. Place light face down then evenly remove the four socket head screws (1) (using a 3mm hex key) from the rear cover (2)
- 3. Remove the rear cover, then remove the globe by inverting the light and allowing the globe to fall free of the housing (Note: the focal ring (5) may come out with the globe)
- 4. Place light face down
- Disconnect cable from the HID bulb (3) by pulling on bulb connector (4) firmly and place bulb on a flat surface
- 6. Re-locate the focal ring into the reflector with the stepped face facing inwards
- 7. Connect new HID bulb to connector (4)
- 8. Carefully position new HID bulb into focal ring (5)
- 9. Refit rear cover to housing ensuring the rear cover seal (6) and spring (7) are still in place. If seal becomes dislodged refit to the rear cover.
- 10. Refit the four socket head screws to the specified torque of 2.5 Nm.



DRIVING LIGHT FILTERS

Durable polycarbonate covers should remain fitted to your HTX2 Hybrid Driving Lights at all times. They are capable of absorbing road grime and bombardment for many years. These replaceable covers should be renewed from time to time to protect your investment and maintain maximum beam output. Your HTX2 Hybrid Driving Light(s) come standard with spot filters. Clear combo filters are used to change the beam output of the HID bulb only.

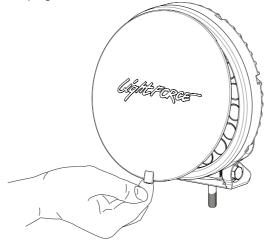
FILTER REMOVAL

- Filter is held in place by 4 clips
- Lift tab at bottom of light and pull filter away from bezel releasing the clips.

FILTER REFITTING

- Insert the filter at the top position
- Push filter onto bezel using filter tab until side clips are engaged





PLEASE NOTE

Lightforce driving lights are designed to be mounted in the horizontal/forward facing position only.

Pointing the light upwards can cause heat damage to the lens. Failure to comply with this requirement may void warranty.

The HTX2 Black Covers should never be installed on your HTX2 Hybrid Driving Lights when they are in operation as this can cause catastrophic failure due to overheating.

DO NOT REMOVE THE FRONT BEZEL. THIS MAY VOID WARRANTY.

WARRANTY CONDITIONS FOR AUSTRALIA

"Lightforce" means Lightforce Australia Pty Ltd ABN 54 069 439 774 Address: 11 Manton Street, Hindmarsh, SA, 5007. Telephone: +61 8 8440 0888. Email Address: sales@lightforce.com

"Lightforce Affiliates" means Lightforce, Lightforce related bodies corporate (within the meaning of the Corporations Act 2001), and their respective employees, officers, agents, and contractors.

"Warranty Period" means:

Lightforce products claimed for repair or replacement under the conditions of a defect in materials or workmanship within normal use and conditions, are valid for the time period of three (3) years from the date of purchase; except accessories, switches, made-to-order items, custom built items, brackets, fascia and harness, bulbs, batteries and mounts which is one (1) year from the original date of purchase specified on your sales receipt or invoice.

Only Lightforce products and parts which remain unaltered from their factory supplied design are eligible for warranty. Modifications made to the product, any collision or impact damage of any kind, product tampered in any manner, including poor installation will void warranty.

REPAIR OR REPLACEMENT OF A PRODUCT OR PARTS:

A replacement product or part is warranted for the balance of the period remaining on the original product contract. A warranty replacement/repair does not constitute a new warranty period of (3) years or (1) year whichever is the correct warranty period. Products and parts presented for repair or replacement may be replaced by products of the same type, or superseding designs.

Goods presented for repair may be replaced by refurbished goods of the same type rather than being repaired. Refurbished parts may be used to repair the goods.

MAKING A CLAIM:

Under this warranty and unless Lightforce otherwise agrees in writing, you bear the cost of claiming under this warranty, Lightforce will however, bear the reasonable cost of transporting the product to Lightforce and returning the product to you.

Lightforce must assess warranty claims before a claim can be granted unless otherwise arranged for and by Lightforce.

To make a claim you will need;

- The receipt of purchase or similar proof AND
- The product being claimed for AND
- Have registered the claim with Lightforce by;

Calling **1800 03 03 08** and speaking with a warranty support officer OR

By emailing support@lightforce.com

A support officer will raise a case number and provide you with any necessary labelling and freight paperwork to process the claim.

USE OF PERSONAL INFORMATION:

This warranty will not apply if you do not supply to us or to our Lightforce Affiliates information that we reasonably request to enable us to perform our obligations under this warranty. You have the right to access your personal contact information and request correction of any errors in it pursuant to the Privacy Act 1988 by contacting Lightforce.

STATUTORY RIGHTS:

Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

LIMITATION OF LIABILITY:

- Where permitted, or not prohibited, under any law, including under the Australian Consumer Law, Lightforce and Lightforce Affiliates' liability in respect of any defect in materials or workmanship or in respect of a product which is not otherwise of acceptable quality (within the meaning of the Australian Consumer Law), is limited at the option of Lightforce, to:
 - a. The replacement or repair of the product,
 - b. The payment of the cost of replacing or repairing the product; or
 - c. The payment of the cost of acquiring an equivalent product.

- Accordingly, to the extent permitted or not prohibited under any law (including the Australian Consumer Law):
 - a. neither Lightforce nor any Lightforce
 Affiliates are liable under any
 circumstances (including in contract,
 negligence or other tort, or under any
 other legal doctrine) for third party
 claims against you for damages;
 special, incidental, punitive, indirect or
 consequential damages, including but not
 limited to lost profits, business revenue,
 goodwill or anticipated savings; and
 - b. in no case does the total liability of Lightforce, Lightforce Affiliates, or their respective suppliers, resellers or service providers to any person for damages from any cause (including in contract, negligence or other tort, or under any other legal doctrine), in connection with the supply of a product exceed the lesser of the actual direct damages of that person and the amount paid for the product by that person.

The foregoing limitations do not apply to damages for bodily injury (including death), damage to real property or damage to tangible personal property for which Lightforce is liable under any nonexcludable law



For warranty information and to register your product for warranty purposes, visit lightforce.com/warranty

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