

Xray Vision Driving Light Fitting Instructions

Safety

Please check your local statutory legislation before fitting your driving lights. It is recommended that a trained technician install the lights. Wear appropriate safety glasses and equipment when using tools and observe safe work practices.

Mounting

Make sure the lamp is mounted on a strong flat surface that supports the whole mounting plate. Select a suitable mounting position and drill an 11mm hole. Mount the light using the flat washer, spring washer and nut. Note: when using a stainless steel nut and bolt 'galling' can occur, this is when the nut and bolt become thread bound. To lessen the probability of this occurring, a boundary layer lubricant should be applied to the threaded surfaces. Molybdenum disulphide grease is recommended although any automotive grease will suffice. Xray Vision driving lights are designed to be mounted vertically with mounting plate below the lamp housing.

Alignment

Align lights on a horizontal plane using a horizontal surface of the vehicle as a reference point. Align lights on a vertical plane to be at a right angle to the ground. For final alignment adjust each light individually (at night) in a safe location, to suit driving conditions and drivers preference.

Wiring Colour Codes

White wire □Positive supply to QH globe or HID ballast for lamp operation.

Black wire ■Negative supply to QH globe or HID ballast for lamp operation.

Green wire ■Positive supply to LED position lights (200 Series QH and HID, 220 Series QH and HID, LED Series with position light feature).

220 Series Operating Voltage

QH fitted with 12 volt globe and LED position light is 12 volt. For 24 volt operation of lamp and LED position light fit part number DL220-24V.

HID system is 12 and 24 volt compatible as standard. LED position light is 12 volt. For 24 volt operation of LED position light fit part number DL220-HID24V.

200 Series Operating Voltage

QH fitted with 12 volt globe and LED position light is 12 volt. For 24 volt operation of lamp and LED position light fit part number DL200-24V.

HID system is 12 and 24 volt compatible as standard. LED position light is 12 volt. For 24 volt operation of LED position light fit part number DL200-HID24V.

160 Series Operating Voltage

QH fitted with 12 volt globe, for 24 volt operation remove QH globe and replace with part number 71140. HID system is 12 and 24 volt compatible as standard.

LED Series Operating Voltage

LED system is 12-30 volt compatible as standard.

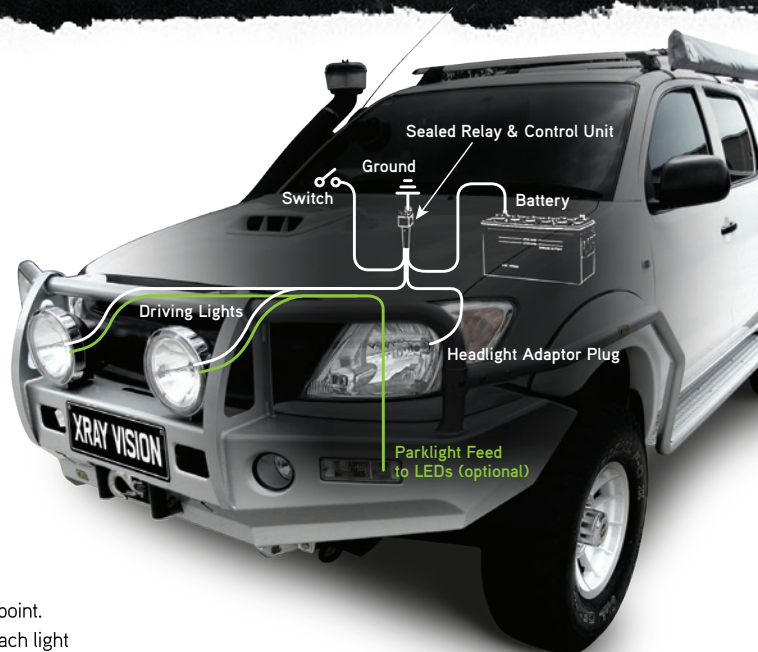
Xray Vision Heavy Duty Wiring Harness

To gain maximum performance from your Xray Vision driving lights it is highly recommended that you use an Xray Vision Quick Fit wiring harness.

This harness makes connection to any vehicle wiring system simple and fast. This kit will automatically compensate for both positive and negative switching headlight circuits and provides maximum voltage to your lamps to give optimum performance. The Xray Vision harness is also circuit protected and allows an illuminated switch to easily be installed.

Xray Vision Security Locknuts

Secure your investment with Xray Vision Security Locknuts. Secure one set of 160, 200, or 220 Series Xray Vision driving lights (doesn't suit 160-S Series or LED Series)



Take the hassle out of wiring with a quick fit, heavy duty, wiring harness

Install your driving lights in three easy steps.

DLWIRE-KIT-12V

DLWIRE-KIT-24V



Secure your investment with security locknuts

Secure one set of 160, 200, or 220 Series Xray Vision driving lights (doesn't suit 160-S Series or LED Series driving lights).

DLLOCKNUT



Further enhance your experience with these great Xray Vision lighting products!

90W SS HID DRIVING LIGHTS

For anyone who drives in outback and regional areas, the power and distance of the HID's are a MUST HAVE to avoid road hazards, wildlife, plus assist with reducing driver fatigue. Ideal for long haul transport operators, people who live and work in rural areas, and anyone who's planning to tour the great Australian outback. The 90W Soft Start HID driving lights have set a new Australian benchmark in aftermarket lighting.



LED DRIVING LIGHTS

The LED driving lights are ideal for use in semi-rural areas, along the coastal roads and highways, through hinterland winding hills, and for exploring beaches and bush tracks after dark. Suitable for interstate highway trucks, touring 4WDs, or even the family off-road wagon.



100W OH DRIVING LIGHTS

These versatile lights greatly enhance the vehicles existing headlights, making them useful for almost any task from highway coastal driving, to off-road exploring, to living and working in semi-rural and rural areas of Australia. Built with the same rugged die-cast alloy housings and high performance die-cast alloy reflectors as the market leading Xray Vision HID's



LED OFF-ROAD LIGHTBARS

LED off-road light bars are a great complementary lighting product to existing driving lights on a truck or 4WD, providing additional light between the vehicle headlights and the long distance beam pattern of the driving lights. These LED off-road lightbars are also perfect for serious off-road racing and general off-roading.



35W & 50W HID UPGRADE KITS

Xray Vision HID conversion kits are custom manufactured to exacting standards—standards that exceed even the OEM requirements for HID stipulated by the likes of BMW or Mercedes. It is this exceptional level of quality control that makes the Xray Vision HID conversion kits the best and brightest currently available in Australia.



LED WORKLIGHTS

Available in a wide range of outputs, configurations and light beam patterns, Xray Vision LED worklights can be used as worklights, camping lights, scene lights, reverse lights, cabin lights, and more. Suitable for use on recreational 4WDs, commercial vehicles, heavy transport vehicles, farm machinery, and mining equipment and vehicles.





Quad-optic LED linear driving light installation and alignment instructions



Congratulations on purchasing an Xray Vision quad-optic LED linear driving light: which has true driving light performance in a distinctive, sleek form-factor! We know you're going to love it!

Before you get started on the installation, predetermine the main mounting hole positions and assess whether the mounting feet need to be positioned inward or outward. Also assess whether the driving light will be mounted on a horizontal surface, or if it will be mounted on an angled surface, vertical surface, or hanging position.

If you're installing onto a horizontal surface, with feet in the original inward position:

Use the instructions on page 2

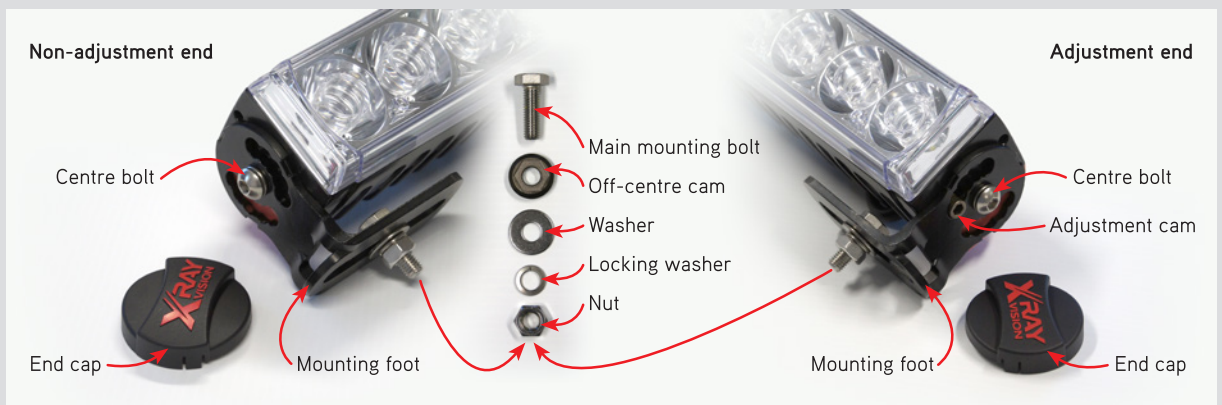
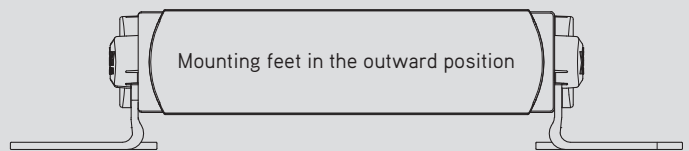
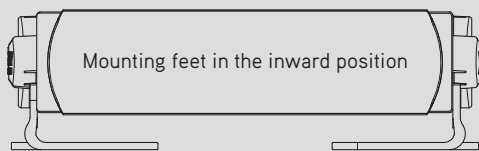
If you're installing onto a surface other than a horizontal surface (angled, vertical, or hanging positions), and/or with mounting feet in the outward position:

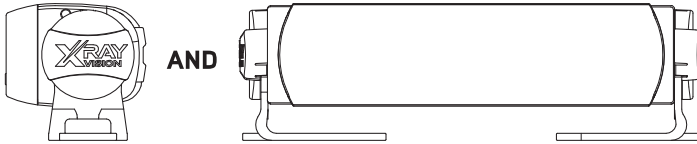
Use the instructions on page 3

Once installed, for wiring and driving light alignment instructions (for all installation types):

Use the instructions on page 4

Terms and parts mentioned throughout this instruction sheet:





Mounting instructions for installation onto a horizontal surface, with feet in the original inward position:

- Select the desired mounting location on the vehicle; mounting hole diameters must be between 10mm and 12mm



- Take product and remove both Xray Vision branded end caps (one on each end of the driving light) using a fine blade screwdriver



- Using a 6mm Allen key, loosen centre bolt on both ends, but do not remove

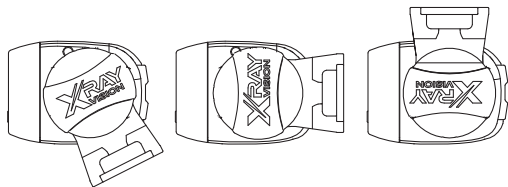


- Remove the nut and washers from both main mounting bolts, but leave both bolts and off-centre cams in place

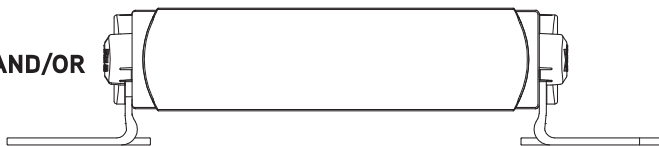


- Position driving light in desired mounting location, then loosely fix main mounting bolt washers and nuts to hold the light into position (do not tighten at this stage as mounting bolts need to be left loose until final alignment adjustments have been made at the end of the installation process)

For wiring and alignment instructions, turn to page 4 →



AND/OR



Mounting instructions for installation onto surfaces other than a horizontal surface (angled, vertical, or hanging positions), and/or with mounting feet in the outward position:

- Select the desired mounting location on the vehicle; mounting hole diameters must be between 10mm and 12mm



- Take product and remove both Xray Vision branded end caps (one on each end of the driving light) using a fine blade screwdriver



- Using a 6mm Allen key, loosen centre bolt on the non-adjustment end (to reverse mounting foot to outward position, fully remove centre bolt, turn mounting foot 180°, refit centre mounting bolt without tightening)



- Identify the mounting bracket that contains the adjustment device, remove centre bolt and mounting foot, while taking care not to lose the adjustment cam



- Remove the nut and washers from main mounting bolt on the non-adjustment end, leaving the bolt itself and off-centre cam in place
- Position driving light in desired mounting location, with the non-adjustment end mounting foot still attached to the product, place mounting bolt in mounting hole and loosely fix mounting washers and nut to hold that end of the light into position (do not tighten at this stage as mounting bolts need to be left loose until final alignment adjustments have been made at the end of the installation process); at this point, position driving light so that the lens is approximately perpendicular to the ground (90° vertical)



- Then re-insert the adjustment cam on the adjustment end of the driving light (hex socket at top), remove the nut and washers from the main mounting bolt (leave the bolt itself and off-centre cam in place), then place mounting foot into required position—selecting suitable hole in the mounting bracket for the adjustment cam (plus reverse mounting foot 180° if outward position is required), and loosely reinstall the centre bolt



- Then loosely fix main mounting bolt washers and nuts to hold the light into position (do not tighten at this stage as mounting bolts need to be left loose until final alignment adjustments have been made at the end of the installation process)

For wiring and alignment instructions, turn to page 4 →

Wiring instructions

- **All models**
 - **BLACK WIRE:** to earth; to minimise voltage drop earth to a secure chassis ground point
- **300 and 600 Series**
 - **WHITE WIRE:** to positive
- **900 and 1200 Series single beam models**
 - **RED WIRE:** to positive; for centre section(s) switching
 - **WHITE WIRE:** to positive; for outer sections switching
- **900 and 1200 Series dual beam models**
 - **RED WIRE:** positive; for pencil beam switching
 - **WHITE WIRE:** positive; for spread beam switching
- **All models (optional)**
 - **GREEN WIRE:** for integrated LED position lights
- Note: as per ADR requirements, main driving light beams (both pencil and spread) must be isolated by separate switch, and must only activate with vehicle high beam
- Ensure adequate circuit protection is used in installation, and we also highly recommended you use a genuine Xray Vision quick fit wiring harness for a trouble-free install

Driving light beam alignment



- For left/right beam alignment, use a 17mm spanner and rotate the bolt head left or right until the desired alignment is achieved; note: approximately 6mm of forward and backward adjustment is available on each side



- Once satisfied with the left/right alignment, hold a 17mm spanner in place on bolt head (to maintain alignment position) and use a 17mm socket to tighten the nuts on the underside of the main mounting foot bolts



- For up/down alignment, use a 6mm Allen key to turn the adjustment cam up or down until you reach the desired beam angle of 0° (90° to the horizontal plane); many modern smartphones have a leveling App built-in

CAUTION: do not attempt to move the adjustment cam without loosening the centre bolts, otherwise damage to the driving light unit and adjustment cam could occur!

Note: final incremental adjustment may need to be performed (in a safe location) on the road at night, to suit your personal preference and driving conditions



- Once driving light up/down alignment is completed, fully tighten the centre bolts on each end using 6mm Allen key



- Lastly, reinstall the Xray Vision branded end caps by aligning two of the clips, then simply snapping the third back into place

Slimline LED Driving Light Fitting Instructions

Safety

Please check your local statutory legislation before fitting your driving lights. It is recommended that a trained technician install the lights. Wear appropriate safety glasses and equipment when using tools and observe safe work practices.

Mounting

Select a suitable position. Make sure the lamp is mounted on a strong flat surface that supports the whole mounting feet. Mount the light using the flat washer, spring washer and nut.

Alignment

Align lights on a horizontal plane using a horizontal surface of the vehicle as a reference point. Align lights on vertical plane to be at a right angle to the ground.

For final alignment adjust each light individually (at night) in a safe location, to suit driving conditions and drivers preference.

Wiring Colour Codes

White wire □ Positive

Black wire ■ Negative

Operating Voltage

Multi-voltage 10-30VDC
(all models)

Amperage draw

950 Series
7.5A@12V

650 Series
5A@12V

450 Series
3.75A@12V

350 Series
2.5A@12V

Off-road LED Series Lightbar (DLC)

2.5A@12V (6 LED), 3.75A@12V (9 LED), 5A@12V (12 LED)



Quick Fit Heavy Duty Wiring Harness

Take the hassle out of wiring auxiliary lights to your vehicle

DLWIRE-KIT-12V (12V)

DLWIRE-KIT-24V (24V)



Security Locknuts

Secure your investment with security locknuts

DLXLOCKNUT-01
(suits one lamp)



Warranty

Britax Automotive Equipment (BAE) guarantees this product against defects of materials and workmanship for a period of 3 years from the date of purchase provided the product is used for its proper purpose, and is installed in accordance to this instruction sheet. BAE will at its own option and cost make good, or replace this product with the same or similar product and return it to you, or provide a credit, if the product proves to be defective within the limits set out above provided that no repairs, alterations, or modifications to the product have been undertaken or attempted by anyone, other than BAE or their authorised agents. Should you wish to make a claim under this guarantee, the product and proof of purchase must be returned pre-paid by you to the place of purchase. This guarantee is in addition to and does not take away from any other rights and remedies you may have under any relevant law.

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. Please retain your proof of purchase for all warranty claims.

Xray Vision Quick Fit Auxiliary Wiring Harness Installation

Part Numbers: DLWIRE-BULK-12V, DLWIRE-KIT-12V & DLWIRE-KIT-24V

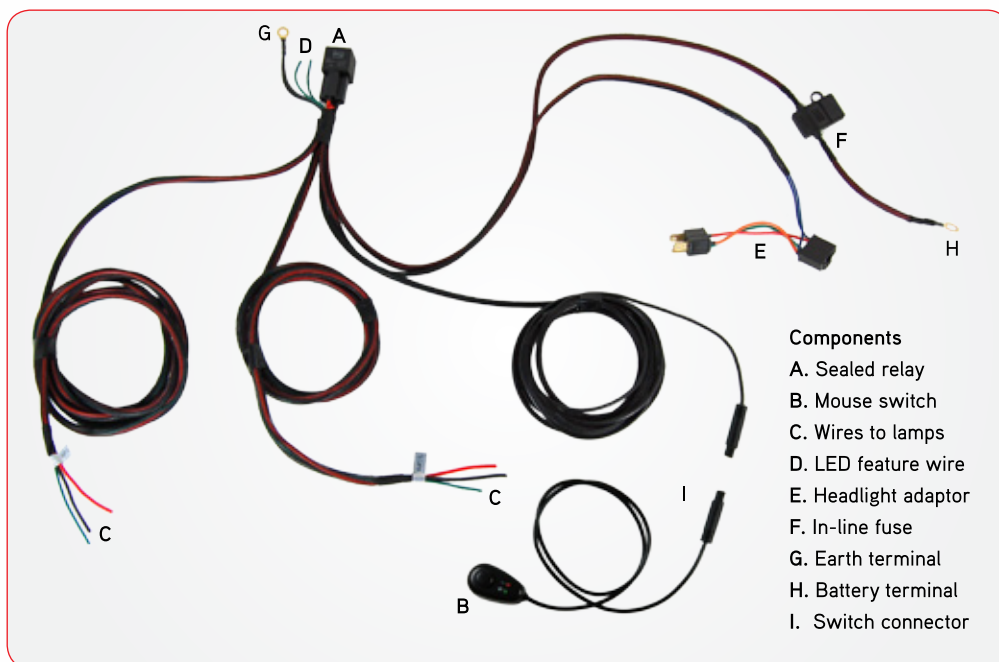
Introduction

This quick fit harness can be used for the installation of any Quartz Halogen and HID auxiliary lamps. This harness is designed to simplify connection to both positive and negative switched headlight circuits. It does not require polarity checking for different systems as the integrated electronics in the harness automatically cater for each system type.

Familiarize yourself with the harness connections by laying it in position across the front of the vehicle.

Safety Notice

Disconnect the negative battery lead before commencing any electrical work. Always wear suitable safety equipment including eyewear when using hand tools.



Components

- A. Sealed relay
- B. Mouse switch
- C. Wires to lamps
- D. LED feature wire
- E. Headlight adaptor
- F. In-line fuse
- G. Earth terminal
- H. Battery terminal
- I. Switch connector

1. Relay Fitment

Locate a suitable mounting place for the relay in close proximity to a power source ie, positive battery or alternator terminal.

(Note connecting battery supply is the final procedure connecting prior to this may void warranty)

Check all cables can reach their respective components. The cables should be routed away from heat sources and moving objects. Plug the black relay connector onto the relay. Mount the relay in an upright position protected from moisture and heat. The mounting bolt must pass through the eye terminal with two black wires running to it and be secured to an adequate earth point on the vehicle body.



2. Switch Fitment (included mouse switch)

Run the black three core switch cable into the vehicle cabin via a suitable rubber grommet in the firewall.

Locate a suitable mounting position for the mouse switch remove adhesive protective film and stick switch into position.

(Note, mounting surface must be thoroughly cleaned)

Carefully route the black three core switch cable to the switch location. Cut cable to length and crimp provided terminals to all three wires.

Slot terminals into white terminal housing making sure you align white wire to white wire on switch, red to red, black to black.

Plug newly fitted white connector into the already fitted plug on the mouse switch.



2. Optional Switch Fitment (optional rocker switch)

For fitment of other switch types ie, illuminated rocker switches. Red wire positive supply, Black wire negative supply, White wire relay trigger wire.



Cole Hersee Rocker Switches:

Amber 58312-A4B

Red 58312-R4B

Green 58312-G4B

Clear 58312-C4B



Xray Vision Quick Fit Auxiliary Wiring Harness Installation

Part Numbers: DLWIRE-BULK-12V, DLWIRE-KIT-12V & DLWIRE-KIT-24V

3. Auxiliary Lamp Wiring

Identify a suitable path from the relay to the auxiliary lamps and route cables labelled 'To lamp' then cut cables to required length.

Connect red wire to positive lamp input (For Xray Vision driving lamps, both HID and QH this will be the white wire).

Connect Black wire to the negative lamp input (For Xray Vision driving lamps, both HID and QH this will be the Black wire).

The Green wire is used for applications requiring LED position lights. Disregard the green wire for lamps without this function.

Connect the green wire to the LED lamp input (For Xray Vision driving lamps, both HID and QH this will be the Green wire)

4. Optional LED Illumination Function

The LED position light is most commonly connected to the park light circuit therefore illuminating when parkers/clearance lights are activated. It can also be activated via an independent switch.

To connect to the park lamp circuit locate a positive feed to the parkers.

Connects the two green wires (exiting the harness at the relay) to a park lamp positive supply. Generally this will be located adjacent to the headlamp.



5. H4 Headlight Adaptor Fitment

Take the H4 headlight adaptor and route it to the vehicle headlamp closest to relay mounting position.

Remove headlight H4 3 pin connector and plug it into the 3 pin male H4 connector on the adaptor of the driving lamp harness. Then plug the female 3 pin H4 adaptor connector back onto the headlight H4 globe.



5. Non H4 Headlight Adaptor Fitment

Simply cut the blue wires near the H4 adaptor; discard adaptor. Connect the two blue wires to the two high beam wires running into the headlamp or directly at the back of the high beam globe. (Note this connection is not polarity conscious and does not require testing; it will function connected either way)



6. Final Steps to Check and Test

Connect main red power cable to a positive terminal on the battery or alternator.

Check that all connections and all cables are secured in a safe manner.

Reconnect vehicle earth to battery.

Finally check auxiliary lamps and mouse switch function correctly as follows:

High beam ON	Mouse switch ON	(LED green)	Driving lamps ON
High beam ON	Mouse switch OFF	(LED red)	Driving lamps OFF
Low beam ON	Mouse switch ON	(LED off)	Driving lamps OFF



That's it! If everything is working correctly, you are now ready to enjoy the market leading performance and durability of Xray Vision Driving Lights!