



**4X4
ACCESSORIES**

ARB INTENSITY

S O L I S



User Guide & Installation Instructions

SJB21EUX2

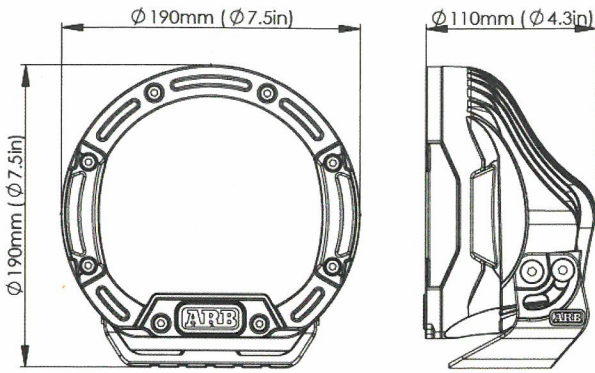


FIGURE 1.

CARE, MAINTENANCE

- There are no user serviceable components inside the light - DO NOT disassemble.
- Clean with warm soapy water and a sponge or soft brush. DO NOT use solvents, scourers or hard bristle brushes. DO NOT use harsh wash chemicals, these will remove the protective clear coat from the lens and lens cover.
- Remove the clear cover periodically to clean the light lens.
- Ensure all electrical connectors and wiring loom are secured away from sharp edges and hot surfaces.
- Regularly check all mounting and adjusting bolts to ensure they are secured and tight.
- If your light requires further service or repair, return it to your local ARB distributor.

USING THE TOUCHPAD

The Touchpad is a unique ARB Intensity Solis product (Figure 2). This device illuminates when the vehicle clearance lights are active and operates the ARB Intensity Solis lights when the vehicle high beam lights are active.

To activate the ARB Intensity Solis lights, press the ARB logo, the ARB logo will illuminate WHITE and the lights become actively controlled (on/off) with the vehicle high beam lights. To deactivate the ARB Intensity Solis lights, press the ARB logo, the ARB logo will illuminate RED indicating the system is in standby mode.

The Touchpad can adjust the intensity level of the ARB Intensity Solis lights. Pressing the up and down buttons will increase and decrease the intensity of the lights respectively. The intensity bars will illuminate to indicate which setting is selected. Note, for on-road mode the max level is level #3, due to UNECE R149 compliance this is the max setting the Touchpad will achieve in on-road mode. See off-road mode for further details.

The Touchpad will remember all previous settings and revert to this setting until altered by the user.

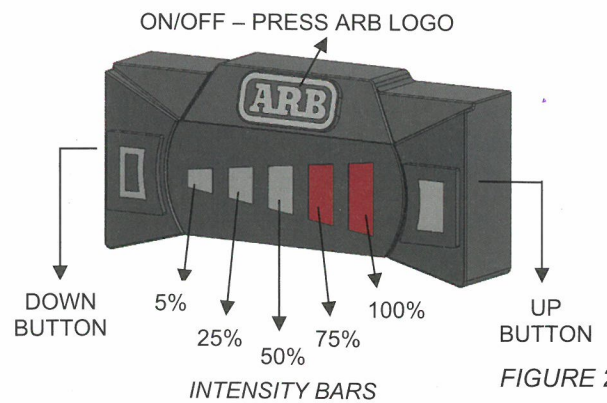
OFF-ROAD MODE

For off-road use only, switch the Touchpad OFF with the ARB button, then press & hold the UP button for 5 seconds, this will activate the driving lights and enable the two brightest intensity levels. The two brightest intensity bars illuminate red to indicate they are not UNECE R112/R149 compliant for on-road use. To revert to on-road mode, press and hold the UP button for 5 seconds. DO NOT activate off-road mode while operating on public roads.

SPECIFICATIONS, FEATURES

- 21 Osram LED (15x 4W + 6x 5W).
- 50,000+ Hour LED life span.
- Input voltage 10-30VDC.
- Raw Lumens 9133LM.
- Colour Temperature: 5700 Kelvin.
- 9° full beam width.
- Operating Temperature -40°C to +65°C, -40°F to +149°F.
- Weight 2.73kg (6.02lbs)
- Integrated thermal management.
- Multiple position mount.
- Pressure equalisation breather.
- High pressure die-cast aluminium body and mount.
- Virtually unbreakable polycarbonate lens.
- UV stable moulded polycarbonate lens cover.
- Durable UV stable powder coat.
- High power Amphenol AT06 waterproof connector.
- Over Voltage Protection to 30VDC.
- Protected against RFI/EMC interference.
- Dust and waterproof to IP68.
- Tested to MIL810-STDG for vibration.
- RoHS compliant.
- CE compliant.
- UNECE R10 compliant.
- For Intensity Level #3 (UNECE R149 compliant).
 - Power draw 36W.
 - Current draw 2.7 Amps @ 13.2V.
 - Effective Lumens 2,700LM.
 - Distance @ 1Lux – 426m (single light).
- For Intensity Level #5.
 - Power draw 82W.
 - Current draw 6.2 Amps @ 13.2V.
 - Effective Lumens 6,000LM.
 - Distance @ 1Lux – 620m (single light).

TOUCHPAD



SUPPLIED PARTS

2x Light body	6x M8x30 socket head cap screws
2x Clear cover	6x M8 large washer
2x Mount bracket	6x M8 nyloc nut
1x Security torx key tool	8x M8x30 Torx drive button head screw
1x User guide.	8x M8 square nut
4x Nut cover	8x M8 spring washer
4x Replacement bezel insert	14x M8 washer
1x Harness	1x Touchpad

TABLE 1.

LIGHT INSTALLATION

Both vertical and horizontal orientations are possible as shown in Figure 3. Choose the required orientation and following the steps below for installation and adjustment.

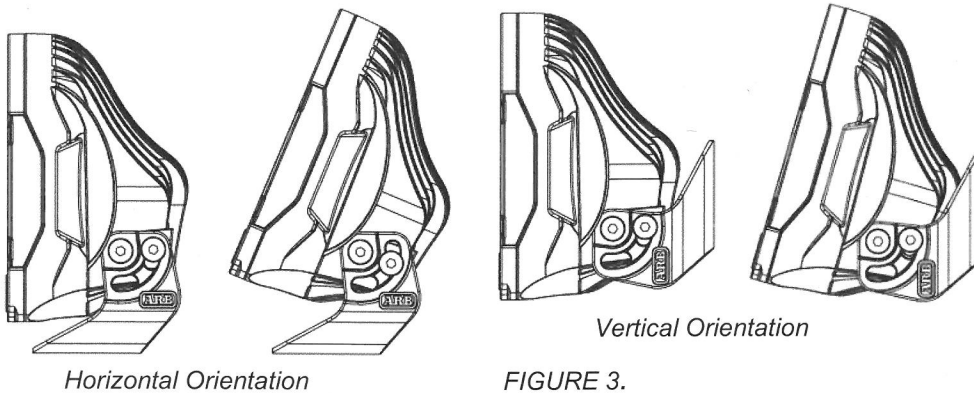


FIGURE 3.

TORQUE SETTINGS

M5 bolts	6 Nm / 4.5 lbft
M8 bolts	12 Nm / 8.9 lbft

TABLE 2.

Step 1.

Place the mount onto the bull bar or flat mounting surface. Align with suitable mounting holes on the bull bar. Where no holes are available, use mount to mark new holes and drill accordingly. Add rust prevention to drilled holes.

Use three M8x30 socket head cap screws, M8 washers, M8 large washers and M8 nyloc nuts to secure the mount as per Figure 4.

Insert the centre screw into the mount and keep loose to allow for adjustment. Align the mount forward facing and ensure the light will illuminate straight down the road. Insert the remaining two screws and tighten all screws to the torque specified in Table 2.

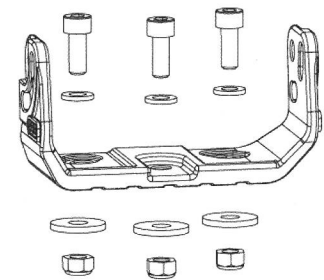


FIGURE 4.

Step 2.

Place the light body on a clean flat surface with the lens facing down. Insert the two M8 square nuts into the light body rear cavity. Insert the nut covers to hold the nuts in position as per Figure 5. Complete for the opposite rear cavity.

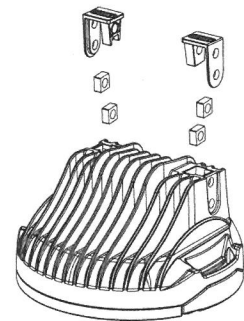


FIGURE 5.

Step 3.

Place the light body into the mount and align the mount and light body holes as shown in Figure 6. Insert four M8 washers, M8 spring washers and M8x30 Torx drive button head screws. Loosely tighten to allow for adjustment later.

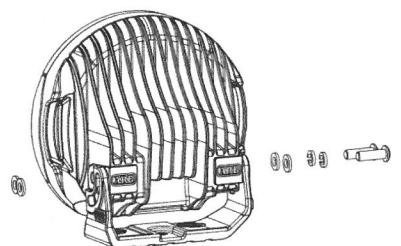


FIGURE 6.

Step 4. (Adjustment).

Point the vehicle toward a flat wall and switch on the driving lights.

For horizontal adjustment, firstly remove the light body and then loosen the three mount bolts. Refit the light body. Complete the horizontal adjustment and then tighten the centre mount bolt to lock the correct mount position. Remove light body from mount and tighten all three mount bolts. Reinstall the light body to the mount as previously described, keep screws loose for vertical adjustment.

For vertical adjustment, measure the light output height on the wall and compare with the driving light height on the vehicle. The two measurements should be similar depending on user preference. Once satisfied with the height position, use the security tool provided to tighten the four security bolts fixing the light body to the mount.

Changing the Bezel Inserts.

Supplied with the light are two replacement bezel inserts. These bezel inserts can be replaced to change the light appearance without effecting the water proof seal. For each bezel insert, remove the two retaining screws. The bezel insert can now be removed from the light as per Figure 7. Install the replacement bezel insert noting the bezel inserts are handed and the correct bezel insert must be installed. Insert the two retaining screws and tighten to the torque specified in Table 2. Complete for the opposite bezel insert.

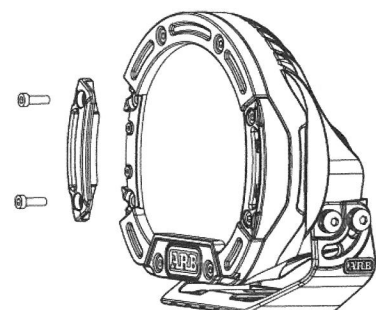
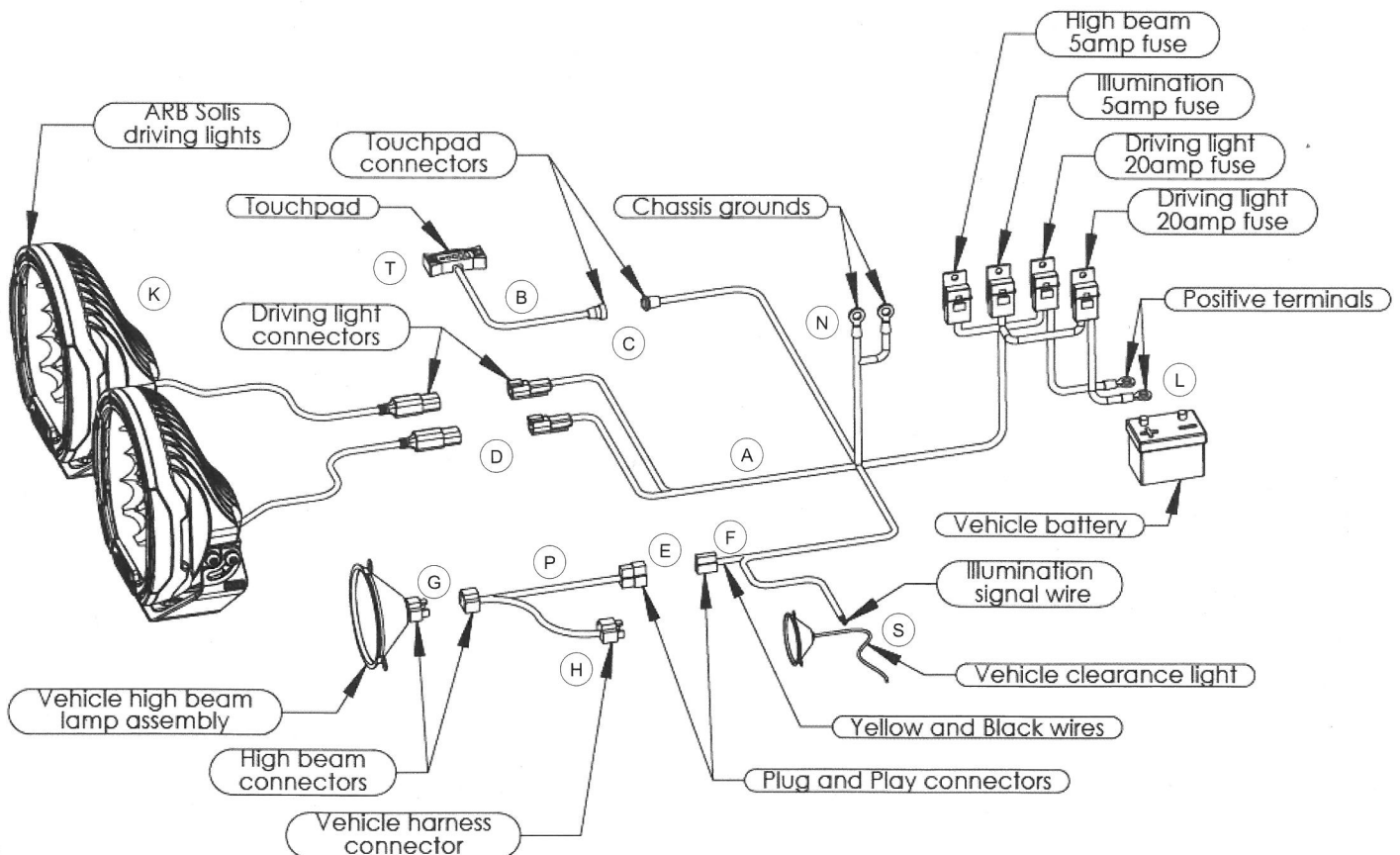


FIGURE 7.

HARNES INSTALLATION

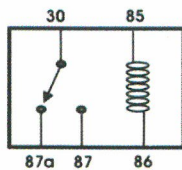
Installation Notes.

- For negatively switched headlamp vehicles, an additional relay is required to operate the driving lights. Please follow Step6 on Page4 of this instruction.
- For CANBUS controlled headlamp vehicles, the high beam and clearance light signals are not available without additional hardware. Please contact your vehicle supplier or ARB for advice on how to connect with these.
- Ensure that the fuses are mounted upright with the terminals facing down. Locate these where it is protected from submersion or splashing from water and mud.
- This product must be installed exactly as per these instructions.
- The installation of this product may require the use of specialised tools and/or techniques.
- It is recommended that this product is only installed by trained personnel.
- These instructions are correct at the date of publication. ARB Corporation Ltd. cannot be held responsible for the impact of any changes subsequently made by the vehicle manufacturer.
- During installation, it is the duty of the installer to check correct operation/clearances of all components.
- Unless otherwise instructed, tighten fasteners to specified torque.
- Ensure all electrical connections are correct and tight with good earth connection to the engine and/or chassis. Failure to do this may result in component failure or fire.
- Make sure all wires are securely fastened away from any hot, sharp or moving surfaces. Do not fasten any wires to the brake lines or fuel lines.
- Make sure that all electrical connections are strong and well insulated.
- Work safely at all times.



Procedure.

1. Remove the negative (-) cable from the battery.
2. Layout the Main harness (A) in engine bay and mount the four fuses in a convenient location. Please note, if required the fuses can be stacked together.
3. If connected, disconnect the Touchpad harness (B) from the Main harness (A).
4. Feed the Touchpad connector (C) on the Main harness (A) through an existing grommet in the firewall and pull through into the vehicle cabin. To assist with this, it is recommended to fold back the cable and pull the connector through tail first. If required, apply lubricate.
5. Place the Touchpad switch harness (B) in the vehicle cabin and connect to the Main harness (A). Secure the Touchpad (T) in a convenient location on the vehicle dashboard.
6. For all negatively switched headlamp vehicles, complete this Step. Otherwise, continue to Step 7.
On the Main harness (A), cut and remove the connector from the Yellow and Black (F) wires. Connect the Black wire (F) to a suitable earth point on the vehicle body or chassis. Obtain a switching relay and connect the relay terminals as per below.



Relay Terminal	Connection
85	Vehicle positive high beam wire
86	Vehicle negative high beam wire
87	Yellow wire (F)
87a	-
30	Battery positive

Continue to Step 11.

7. This kit includes H4 and HB3 / HB4 Plug & Play harnesses (P), if the vehicle headlamps are an alternative to these, complete this Step. Otherwise, continue to Step 8.
On the Main harness (A), cut and remove the connector from the Yellow and Black (F) wires. Connect the Yellow wire (F) to the vehicle positive high beam wire. Connect the Black wire (F) to a suitable earth point on the vehicle body or chassis. Continue to Step 11.
8. Take the Plug & Play harness (P) and connect the High beam connector (G) to the vehicle headlamp.
9. Connect the Vehicle harness connector (H) to the vehicle harness.
10. Connect the Plug and Play connector (E) to the Main harness (A).
For HB3/HB4 vehicles, the positive and negative wires can be either orientation at the HB3/HB4 Vehicle harness connector (H). For this reason, the HB3/HB4 Plug & Play harness is supplied with the white plug non-housed. On the Vehicle harness connector (H), determine which terminal is positive and which is negative. Insert the terminals into the Plug & Play white plug, ensuring at the Main harness (A) connector (F), the positive connects with the Yellow wire and the negative connects with the Black wire.
Yellow = +ve, Black = -ve.
11. Connect the Illumination signal wire (S) with the front clearance light wire (parkers). Alternatively, this could connect with the illumination circuit within the cabin.
12. Connect the Chassis grounds (N) to a suitable ground point on the vehicle body or chassis. Do not connect directly to battery negative.
13. Connect the Driving light connectors (D) to the Solis driving lights (K). Secure all cables, check all connections.
14. Connect the two Positive terminals (L) to the battery positive terminal and reconnect the negative (-) cable to the battery.
15. Check correct operation of the Touchpad and Solis driving lights.



Do not pull on the wiring harness forcefully



Do not connect wiring harness to engine



Ensure all connections are tight and pushed home

WARRANTY

ARB Products Warranty Against Defects

ARB warrants the ARB Products against defects in workmanship and materials for the Warranty Period. If defective workmanship or materials become apparent in the Warranty Period, ARB will replace or repair the defective Product.

The benefits to the customer given by this warranty are in addition to other rights and remedies of the customer under a law in relation to the goods or services to which the warranty relates.

1. In this warranty:
 - a. ARB means ARB Corporation Limited (ABN 31 006 708 756) of 42-44 Garden St, Kilsyth Victoria 3137
 - b. ARB Outlet means an outlet which has been authorised by ARB to sell and fit ARB Products
 - c. ARB Product means products which ARB manufacturers or for which ARB is the exclusive supplier
 - d. Product Information means the information about the relevant ARB Product which may be contained in any of: documentation provided with the ARB Product, owner's manual, operating manual, service manual or the manufacturer's manual or labels attached to the ARB Product
 - e. Warranty Period means, in respect of an ARB Product, the period that this warranty against defects applies and which is set out in paragraph 8.
2. To be entitled to claim the warranty, the customer must:
 - a. Have the ARB Product fitted in accordance with the Product Information
 - b. Carry out normal care and maintenance of the ARB Product, including any required by the Product Information
 - c. Provide proof of purchase of the ARB Product
 - d. Make the claim in the Warranty Period.
3. The warranty will not apply in circumstances where the defect is caused by:
 - a. Unusual, improper or negligent use or misuse of the ARB Product
 - b. Incorrect fitting of the ARB Product other than at an ARB Outlet
 - c. Use of non-genuine ARB components in or with the ARB Product
 - d. Use of the ARB Product outside of the requirements of the Product Information.
4. The procedure for the customer to claim the warranty is:
 - a. Return the ARB Product to the nearest ARB Outlet or contact ARB to arrange a time to bring a vehicle fitted with the ARB Product to an ARB Outlet for inspection. Contact details are in paragraph 7 below if further information is required Regarding local outlet details
 - b. Bring proof of purchase of the ARB Product to the ARB Outlet
 - c. ARB will review the ARB Product and advise whether the conditions of this warranty have been met
5. Where ARB accepts a customer's warranty claim, ARB will rectify any defective workmanship or materials at its own expense.
6. Expenses incurred by the customer in claiming the warranty are to be borne by the customer.
7. This warranty is given by:

ARB Corporation Limited 42-44 Garden Street
Kilsyth VIC 3137, Australia.
Phone: 03 9761 6622.
Fax: 03 9721 9090.
www.arb.com.au
8. The period within which a defect in the ARB Products must appear if the customer is to be entitled to claim the warranty is 3 years starting on the date of purchase unless:
 - a. The ARB Product is used in Commercial Use. Commercial Use means use in industry or commerce including (without limitation) use in the mining industry or as a hire vehicle. In this case, the Warranty Period is 1 year
9. The warranty against defects contained in this document replaces any other warranty against defects or voluntary warranty given in relation to the Products.

Our goods come with guarantees that cannot be excluded under the Australian Customer Law. You are entitled to a replacement or refund for a major failure and compensation for any other reasonable 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.

ARB 4x4 ACCESSORIES

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