PRODUCT SPECIFICATION

DESIGN & DEVELOPMENT:

Following on from the success of the innovative AR32 Intensity LED driving lights, a new compact model has been developed.

The new AR21 Intensity LED driving light is available in either spot or flood beam configuration and with 21 LED’s the performance really packs a punch considering their size.

Physically similar in size to an IPF 900 series light, the AR21 has an outer diameter of 184mm and standing 209mm high including mounting bracket. Utilising the same mounting template as the larger AR32, it also includes the use of pinning bolts where bar design allows.

Like the larger model, the AR21 features a unique molded rubber seal between the polycarbonate lens and pressure cast aluminium body that in conjunction with a Gore® breather and sealed Deutsch electrical connectors ensures a waterproof rating of IP68 with submersion of up to 3m (10ft)

Built from corrosion resistant materials, the aluminium body is finished in a textured polyester powder coat that passes the ISO7253, 3000 hour salt spray test. Enhancing the ARB brand, the distinctive red lens retaining bezel is UV resistant. This combined with the 304 stainless steel mount makes the ARB Intensity light extremely weather and corrosion resistant.
COOLING:

The pressure cast aluminium housing acts as a heat sink to draw heat generated from the electronics away from the LED array, thus increasing efficiency and life of the LEDs. Cooling fins cast into the rear of the housing increase the cooling surface area of the light body by more than 200%.

SECURITY:

Each light has a cap screw pivot bolt with tamper proof TORX® security fasteners used on the adjuster nut for improved security.

The main mounting bolt has a M12 x 1.75 thread which accepts the traditional style security nut and Key as used with IPF lights (P/No. DLL12 available separately).

ELECTRONICS:

The heart of the light is its electronics. Using SMD type Osram LEDs for increased efficiency and brightness, the circuit board sits deep within the light body offering protection to the advanced circuitry whilst mounting directly to the cast housing for optimum heat transfer and cooling efficiency.
OPTICS:

The advanced Patent design optics incorporate both a reflector and lens to control the light emitted from the LED with 93% efficiency.

Designed to offer different light projection patterns, they are the only components that differ between the flood and spot model lights with the flood offering 20° spread and spot a 10° beam.

ADVANCED SEALING:

A unique molded rubber seal sits between the polycarbonate lens and cast aluminium body, creating a watertight and dust proof seal to allow the light to achieve an IP68 rating - meaning complete protection against dust ingress and submersion beyond 3 metres.

To allow expansion of the heated air within the light and suction caused by rapid cooling if immersed, the light is fitted with a Gore® membrane breather which allows the light to breathe without moisture ingress.

The red bezel is integral to the compression of the rubber seal and should not be removed or modified otherwise water ingress may occur.

CLEAR COVER:

Manufactured from 3.5mm injection moulded polycarbonate and hard coated for scratch resistance, the clear cover is standard fitment providing the ultimate protection from impacts. Being 100% optically clear, it does not effect light output performance.

A warning appears on the outer rim of the cover stating - “Warning: High output light source. Do not look directly into optics when light is operating”.

A range of colored covers are under development and will be available as an added option.
COVER ATTACHMENT:

The unique body design features a slotted recess for the clear covers to positively attach to the body and prevent cover rotation. To remove the cover, simply place fingers behind the cover retaining tags and lever outwards whilst pulling the tangs forward.

SPECIFICATIONS:

- High pressure cast A360 aluminium body.
- Unbreakable polycarbonate lens.
- UV stable moulded polycarbonate lens cover.
- Multiple position stainless steel mount.
- Durable UV Stable polyester powdercoat
- Goretex breather.
- IP68 Certified.
- Deutsch DT-06 waterproof connectors.
- MIL810-STDG vibration certified
- RoHS compliant.
- 10-36 V DC input.
- 74 Watts.
- Amp draw 6.1A @ 14.4V.
- 21 LEDs.
- 6950 Raw Lumens
- Colour temperature: 6500 Kelvin
- Lux @ 10m (33Ft) – 2552 (spot) 584 (flood).
- 20° full width flood.
- 10° full width spot.
- Over/under voltage protection.
- 50,000+ Hour LED life span.
- Zero UV emissions.
- Operating temp: -40°C to +63°C
  -40°F to +145°F
- Protected against RFI/EMC interference.
- Integrated thermal management.
- Weight 2.5Kg / 5.5Lb complete.
AR21S SPOT BEAM LUX GRAPH (Not to scale)

AR21F FLOOD BEAM LUX GRAPH (Not to scale)