



BLINDSPOT PROTECTOR

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SECTION 1

AUDIBLE WARNING DEVICES



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TERMS & CONDITIONS

1. INTERPRETATION

1.1 In these Conditions the following words shall have the following meanings: "Buyer" means the purchaser of the goods; "Conditions" means the standard terms and conditions of sale set out in this document and (unless the context otherwise requires) includes any special terms and conditions agreed in writing between the Seller and the Buyer; "Contract" means any contract incorporating these Conditions between the Seller and the Buyer for the sale and purchase of the Goods; "Goods" means the goods agreed in the Contract to be supplied by the Seller to the Buyer; and "Seller" means Amber Valley Developments LLP a company registered in England under number OC362146 whose registered office is at The Robbins Building, Albert Street Rugby CV21 2SD.

1.2 In these Conditions references to any statute or statutory provision shall unless the context otherwise requires, be construed as a reference to that statute or statutory provision as from time to time amended, consolidated, modified, extended, re-enacted or replaced.

1.3 In these Conditions headings will not affect the construction or interpretation of these Conditions.

2. APPLICATION OF TERMS

2.1 Subject to any variation under condition 2.3, these Conditions comprise all the terms of the Contract between the Seller and the Buyer to the exclusion of all other terms and conditions (including any terms or conditions which the Buyer purports to apply under any purchase order, confirmation of order, specification or other document). No statement, written or oral, including statements in any price list, brochure or promotional literature of the Seller shall be incorporated into the Contract or have any legal effect.

2.2 The terms in these Conditions shall prevail over any terms put forward by the Buyer and no conduct of the Seller shall constitute acceptance of any terms put forward by the Buyer unless the Seller expressly agrees to them in writing signed by a director of the Seller.

2.3 No additions to or variations of these terms shall be binding on the Seller unless in writing signed by a director of the Seller.

2.4 No employee or agent of the Seller has any authority to make any representations on behalf of the Seller as to the effect of these terms.

3. PRICE

3.1 Unless expressly agreed in writing by a director of the Seller or the Seller's sales staff the price for the Goods shall be the price set out in the Seller's price list published on the date of delivery or deemed delivery.

3.2 The Seller reserves the right to vary its published price list by written notice to the Buyer.

3.3 Unless expressly stated otherwise all prices are exclusive of value added tax.

4. PAYMENT TERMS

4.1 Payment for the Goods is due no later than 30 days after the delivery date or date of deemed delivery.

4.2 Time for payment shall be of the essence.

4.3 The Buyer shall make all payments due under the Contract without any deduction whether by set-off, counterclaim, discount, abatement or otherwise.

4.4 If the Buyer fails to pay the Seller any sum due pursuant to the Contract the Buyer;

4.4.1 Will be liable to pay interest to the Seller on such sum from the due date for payment at the annual rate of 6% above the base lending rate from time to time of Lloyds TSB Bank, accruing on a daily basis until payment is made. The Seller reserves the right to claim interest under the Late Payment of Commercial Debts (Interest) Act 1998; and

4.4.2 The Seller shall be entitled (without prejudice to its other claims and rights under the Contract) to suspend or cancel further deliveries or services under this Contract and any other contract between the Seller and the Buyer and treat the Contract as wholly repudiated by the Buyer and forthwith to terminate the Contract.

5. DELIVERY

5.1 The Seller shall use reasonable endeavours to meet any delivery date but any date named by the Seller for delivery is given and intended as an estimate only and is not to be the essence of the Contract. The Buyer shall nevertheless be bound to accept the Goods when delivered.

5.2 The Seller shall not be liable to the Buyer for any losses caused to the Buyer by the late delivery of the Goods.

6. FORCE MAJEURE

6.1 The Seller reserves the right without liability to defer the date of delivery or to cancel the Contract or reduce the volume of the Goods ordered by the buyer if it is prevented from or delayed in the carrying on of its business due to circumstances beyond the reasonable control of the Seller including, without limitation, acts of God, governmental actions, war or national emergency, acts of terrorism, protests, riot, civil commotion, fire, explosion, flood, epidemic, lock-outs, strikes or other labour disputes (whether or not relating to either party's workforce), or restraints or delays affecting carriers or inability or delay in obtaining supplies of adequate or suitable materials.

7. QUALITY

7.1 The Seller warrants that (subject to the other provisions of these Conditions) upon delivery the Goods will: 7.1.1 conform with any description given to the Buyer by the Seller; and 7.1.2 be of satisfactory quality within the meaning of the Sale of Goods Act 1994.

7.2 It is the Buyer's responsibility to inspect and test the Goods and each and every part thereof to see that they are in order.

7.3 If any of the Goods do not conform with any of the warranties in condition 7.1 the Seller shall at its sole option either:

7.3.1 repair or replace the defective Goods (or the defective part); or

7.3.2 allow full credit for the defective Goods provided that if the Seller so requests the Buyer shall at the Seller's expense return the Goods or the part of such Goods which is defective to the Seller.

8. LIMITATIONS ON LIABILITY

8.1 Subject to condition 7 the following provisions set out the entire financial liability of the Seller (including any liability for the acts or omissions of its employees, agents and sub-contractors) to the Buyer in respect of:

8.1.1 any breach of these Conditions; and

8.1.2 any representation, statement or tortious act or omission including negligence arising under or in connection with the Contract.

8.2 All warranties, conditions and other terms implied by statute or common law (save for the conditions implied by section 12 of the Sale of Goods Act 1979) are, to the fullest extent permitted by law, excluded from the Contract.

8.3 Nothing in these Conditions excludes or limits the liability of the Seller for death or personal injury caused by the Seller's negligence or fraudulent misrepresentation.

8.4 Subject to conditions 8.2 and 8.3:

8.4.1 the Seller's total liability in contract, tort (including negligence or breach of statutory duty), misrepresentation, restitution or otherwise arising in connection with the performance or contemplated performance of the Contract shall be limited to the price paid by the Buyer to the Seller for the Goods.

8.4.2 the Seller shall not be liable to the Buyer for any indirect or consequential loss or damage (whether for loss of profits, loss of business, depletion of goodwill or otherwise), costs, expenses or other claims or consequential compensation whatsoever (howsoever caused) which arise out of or in connection with the Contract.

9. TIME FOR NOTIFYING DELIVERY SHORTAGES

9.1 The Seller shall not be liable in any way whatsoever for short delivery unless the Buyer notifies the Seller of any shortage within 3 working days of date of delivery or deemed delivery.

10. RISK AND TITLE

10.1 The Goods are at the risk of the Buyer from the date of delivery.

10.2 Ownership of the Goods shall not pass to the Buyer until the Seller has received in full (in cash or cleared funds) all sums due to it in respect of:

10.2.1 the Goods; and

10.2.2 all other sums which are or which become due to the Seller from the Buyer on any account.

10.3 Until the ownership of the Goods has passed to the Buyer, the Buyer must:

10.3.1 hold the Goods on a fiduciary basis as the Seller's bailee;

10.3.2 store the Goods (at no cost to the Seller) separately from all other goods of the Buyer or any third party in such a way that they remain readily identifiable as the Seller's property;

10.3.3 not destroy, deface or obscure any identifying mark or packaging on or relating to the Goods;

10.3.4 maintain the Goods in satisfactory condition and keep them insured on the Seller's behalf for their full price against all risk to the reasonable satisfaction of the Seller. On request the Buyer shall produce the policy of insurance to the Seller; and

10.3.5 hold the proceeds of the insurance referred to in condition 10.3.4 on trust for the Seller and not mix them with any other money, nor pay the proceeds into an overdrawn bank account.

10.4 If the Buyer:

10.4.1 has a bankruptcy order made against him or makes an arrangement or composition with his creditors, or otherwise takes the benefit of any statutory provision for the time being in force for the relief of insolvent debtors, or (being a body corporate) convenes a meeting of creditors (whether formal or informal), or enters into liquidation (whether voluntary or compulsory) except a solvent voluntary liquidation for the purpose only of reconstruction or amalgamation, or has a receiver and/or manager, administrator or administrative receiver appointed of its undertaking or any part thereof, or a resolution is passed or a petition presented to any court for the winding up of the Buyer or for the granting of an administration order in respect of the Buyer, or any proceedings are commenced relating to the insolvency or possible insolvency of the Buyer; or

10.4.2 suffers or allows any execution, whether legal or equitable, to be levied on his/its property or obtained against him/it, or fails to observe/performance any of his/its obligations under the Contract or any other contract between the Company and the Buyer, or is unable to pay its debts within the meaning of section 123 of the Insolvency Act 1986 or the Buyer ceases to trade; or

10.4.3 the Buyer encumbers or in any way charges any of the Goods; then the Buyer's right to possession of the Goods shall terminate immediately, the Seller shall immediately be entitled to the price and the Seller shall be entitled (without prejudice to its other claims and rights under the Contract) to suspend or cancel further deliveries or services under this Contract and any other contract between the Seller and the Buyer and treat the Contract as wholly repudiated by the Buyer and forthwith to terminate the Contract.

10.5 The Seller shall be entitled to recover payment for the Goods notwithstanding that ownership of any of the Goods has not passed from the Seller.

10.6 The Buyer grants the Seller, its agents and employees an irrevocable licence at any time to enter any premises where the Goods are or may be stored in order to inspect them, or, where the Buyer's right to possession has terminated, to recover them.

11. INDEMNITY

11.1 The Buyer shall indemnify the Seller against all claims and demands whatsoever made by any person or persons against the Seller in respect of injury, loss or damage arising directly or indirectly from the delivery and use of the Goods supplied by the Seller, howsoever caused and whether or not amounting to negligence.

12. GENERAL

12.1 Each right or remedy of the Seller under the Contract is without prejudice to any other right or remedy of the Seller whether under the Contract or not.

12.2 If any provision of the Contract is found by any court, tribunal or administrative body of competent jurisdiction to be wholly or partly illegal, invalid, void, voidable, unenforceable or unreasonable it shall to the extent of such illegality, invalidity, voidness, voidability, unenforceability or unreasonableness be deemed severable and the remaining provisions of the Contract and the remainder of such provision shall continue in full force and effect.

12.3 Any concession made by the Seller or waiver by the Seller of any breach of, or any default under, any provision of the Contract by the Buyer will not be construed as a waiver of any of its rights under the Contract.

12.4 Failure or delay by the Seller in enforcing or partially enforcing any provision of the Contract will not be construed as a waiver of any of its rights under the Contract.

12.5 The Seller reserves the right to correct any clerical errors made by its employees at any time.

12.6 The parties to this Contract do not intend that any term of this Contract will be enforceable by virtue of the Contracts (Rights of Third Parties) Act 1999 by any person that is not a party to it.

12.7 The formation, construction and performance of this contract shall be governed in all respects by English Law and the parties submit to the exclusive jurisdiction of the English courts.

13. INTERNET WEBSITE

13.1 Amber Valley Developments LLP retains copyright and intellectual Property rights to content and images on our website. To use content from our website, including images, written permission must first be obtained from Amber Valley Developments LLP.

13.2 Authorised use of content and images must only be used in conjunction with products purchased from Amber Valley Developments LLP and must not be used where such use is likely to cause confusion or deception.

Proprietary notice for technical drawings

The design and technical information appearing on these drawings is the property of Amber Valley Developments LLP and is disclosed in confidence. The information is subject to change and it is not to be copied, reproduced, revealed to or appropriated by others, either in whole or in part without the express written consent of Amber Valley Developments LLP.



VEHICLE CERTIFICATION AGENCY

REVERSING ALARMS MADE SIMPLE



2 Wire Version

This unit will operate when reverse gear is selected. Black lead to earth red lead to reverse lamp.

3 Wire Version Black, Red & Orange Leads

The orange lead is connected through the side lamp and when the lamp is on the unit will not work.

4 Wire Version Black, Red, Orange & Green Leads

The green lead is connected through the fog lamp. This is unique to Amber Valley developments and is designed for foggy weather, because your side lamp (mute) must be on to put your fog lamp on thereby muting the reverse alarm when it is most needed. The fourth lead into the fog light automatically overrides the mute.

3 Wire Version Black, Red & Green

This unit was developed for the plant industry. When the green lead is activated with the normal reverse alarm the unit will sound continuously. This eliminated the need for a horn on the rear of the vehicle. This unit is ideally suited to dual purpose requirements.

Dual Volume Alarms

These were designed where a reduced volume (fixed) was required. The unit operates at a low frequency and because the sound level is also reduced it does not travel far, thereby not disturbing neighbours.

This unit is specifically made for transport fleets in built up areas and has been tested and approved by environmental health and the general public, allowing a national fleet to remain in its premises.

Triple Tone Alarm

This unit again was developed for a large fleet and subsequently adopted by a large truck manufacturer as it immediately alerts staff to the type of vehicle being used. Triple tone alarms were fitted to trucks and a single tone alarm was fitted to fork trucks.

Non Bleeping Alarms

These alarms are designed to be less intrusive as well as being highly effective using speech technology. Also included is our Bell Tone Alarm

Talking Alarms

These are probably the most versatile alarms made as they are programmed in house and can be customised to suit any situation or point out to operators and public any specific dangers. "Hand brake not applied." "Do not drive arms raised etc."

This is especially useful as many vehicles have a variety of buzzers and alarms and it can be confusing for the operator.

We believe that for after-market operational use these alarms will cover 95% of requirements, if not don't worry, we are manufacturers and can supply Self Adjusting Talking Alarms or R2 Talking Alarms with real speech.

Type Approval No:

e11*72/245*2009/19*0277*01

PIC Reverse Alarms and Talking Alarms

Type Approval No:

e11*72/245*2009/19*7568*00

Alarmlights®

R2 Range

This range mutes when reverse gear is selected twice in quick succession. This can be used in conjunction with any type of alarm. For example: **Pet. Reg. Talking Alarms or Triple Tone.**

Dual Tone Alarms

Two separate tones to allow one alarm to be used for two applications.

Self Adjusting Alarms

These alarms listen to the ambient noise and adjust their own volume to be above the ambient noise level. We can offer self adjusting talking alarms also.

Timers and Switches

We supply timer units which when activated by a switch will turn the Reverse alarm off for a given period of time.

Conduits & Connectors

We manufacture alarms with any length or type of cable with or without conduit. The conduit is sealed inside the unit. These can then be fitted with any connector to suit individual customer requirements. These include AMP, Sumitomo, Deutsch. We also mould deutsch connectors directly into the units.

Own branding

We supply many O.E. Manufacturers with own branded products where we mould their name or logo into the bezel supply under their part number with their label. This significantly reduces the number of unjustified warranty claims while also increasing sales by advertising FREE on every unit.

Many original equipment manufacturers have bespoke connectors on their harnesses, ie. Tyco Superseal, Tyco Econoseal, Deutsch, Sumitomo to name a few. These are available from Amber Valley either encapsulated directly into the housing of the alarm or as part of a harness with or without conduit to suit the exact requirements of the vehicle manufacturer.

By incorporating the desired connector with the alarm at the manufacturing stage it has several benefits to the customer:

1. Simple to fit plug and play
2. No excess loose cable to be damaged
3. Fully function-tested at manufacturer
4. Labour saving; cost effective

Own branding of alarms

Many of Amber Valley Developments' products are available so that insert changes at the moulding division can customise the product to the vehicle manufacturer's requirements.



Connector type:
Tyco superseal



Connector type:
vw



Connector type:
deutsch



Amber Valley Developments LLP is proud of its long history of research and development striving to design and deliver safety products to the automotive industry.

We are now uniquely placed to offer complete electrical solutions to many of the smaller manufacturing companies. This is achieved by working closely with our “Partner” supply companies allowing us to provide a kit of parts for each vehicle making significant cost savings to the vehicle manufacturer and reducing supplier numbers.

From design right through to production Amber Valley Developments LLP has got the expertise and logistical capability to offer complete supply chain solutions. As a manufacturer of our own product ranges we are in a position to appreciate the difficulties our customers have and design the solutions at source.

There has never been a better time to contact us with your requirements; and allow us the opportunity to demonstrate how we can save time and resources on new and existing requirements.





LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG

Ministère de la Mobilité
et des Travaux publics

Département de la mobilité
et des transports

Registre de Commerce: B 27160



L-5201 Sandweiler

Référence: E13*10R05/01*15253*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 09 septembre 2019

Communication concernant:⁽²⁾
Communication concerning:



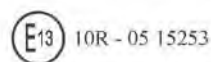
- la délivrance d'une homologation
approval granted
- l'extension d'homologation
approval extended
- le refus d'homologation
approval refused
- le retrait d'homologation
approval withdrawn
- l'arrêt définitif de la production
production definitely discontinued

d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of ~~electrical~~/electronic sub-assembly with regard to Regulation N° 10

Numéro d'homologation par type:
Approval number:

E13*10R05/01*15253*00

Marque d'homologation:
Approval mark:



1. **Fabricant: (marque commerciale du constructeur):**
Make (trade name of manufacturer):

Amber Valley Developments LLP

2. **Type:**
Type:

LoCo Alarm (LoCo 2G)

Dénomination(s) commerciale(s) générale(s):
General commercial description(s):

LoCo Alarm (LoCo 2G)

Version(s)/Variante(s):
Version(s)/Variant(s):

0-564-00, 0-564-05, 059115CV2,
1130062600, 1153801013, 18438248,
18438252, 18438254, 18438255, 20383,
20384, 257.008, 36010900-575, 36010900-613,
40950138/2, 56000, 6102964M91, 7627001D10,
A8872, 8891, AVB100V45-1M, AVB100V66,
AVB75-3, AVBCT1, AVBPL24340, AVISU80,
AVR50, AVR55, AVR57, AVR60, AVR60-3,
AVR60AW, AVR70, AVR70-3, AVR70CT,
AVR70EM, AVR70R2, AVR71, AVR75, AVR75-3,
AVR75AS, AVR75C, AVR75R, AVR80, AVR80HV,
AVR80SPEC, AVR81, AVR85, AVR85-3,
AVR85-3(95), AVR85-3SP, AVR85-3TGS,
AVR85-DP, AVR85GRR, AVR85PT, AVR85R2,



LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de la Mobilité
et des Travaux publics

Département de la mobilité
et des transports

AMBIÉTÉ MATHÉMATIQUE EN
RECHERCHE ET DÉVELOPPEMENT

Registre de Commerce: B 27180

L-8070 Bertrange



Référence: E13*10R06/01*16273*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Bertrange, le 08 août 2022

Communication concernant:⁽²⁾
Communication concerning:



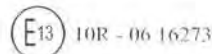
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approval granted
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approval extended
- le refus d'homologation
approval refused
- le retrait d'homologation
approval withdrawn
- l'arrêt définitif de la production
production definitely discontinued

d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of electrical/electronic sub-assembly with regard to Regulation N° 10

Numéro d'homologation par type:
Approval number:

E13*10R06/01*16273*00

Marque d'homologation:
Approval mark:



1. Fabricant: (marque commerciale du constructeur):
Make (trade name of manufacturer):

Amber Valley Limited

2. Type:
Type:

AVRWNSA

Dénomination(s) commerciale(s) générale(s):
General commercial description(s):

Self Adjusting Alarm

Variante(s)/Version(s):
Variant(s)/Version(s):

AVRWNSA01, AVRWNSAXX (XX denoting difference in housing colour and/or tone emitted and/or dB level), AVR1BSA, AVRXXSA (XX denoting difference in housing colour and/or tone emitted and/or dB level)

BUZZERS



AVICB1 12V (BLACK)



Continuous In-cab Buzzer – Lucar Terminals

- Ideal for low air pressure warnings

AVICB1 Technical specification

Volts	dB level	Frequency	Current	Size	Fixing
12	85@30cm	400 Hz	30 mA	40x35	1 Bolt

AVICB2 24V (RED)



Continuous In-cab Buzzer – Lucar Terminals

- Ideal for low air pressure warnings

AVICB2 Technical specification

Volts	dB level	Frequency	Current	Size	Fixing
24	85@35cm	400 Hz	30 mA	40x35	1 Bolt

AVICB14 6-28V

AVICB15 6-28V

AVICB16 6-28V

Dual Voltage Panel Mount Buzzer Lucar Terminals

AVICB17 6-28V

AVICB18 6-28V

Dual Voltage Dual Function Panel Mount Buzzer Lucar Terminals



AVICB14-18 Technical specification

Part No	Op. Voltage	Current	db	Freq	Tone
AVICB14	6 - 28V	20mA@12V	80	2.9kHz	Continuous
AVICB15	6 - 28V	20mA@12V	80	2.9kHz	Fast Pulse
AVICB16	6 - 28V	20mA@12V	80	2.9kHz	Slow Pulse
AVICB17	6 - 28V	20mA@12V	80	2.9kHz	Continuous & Fast Pulse
AVICB18	6 - 28V	20mA@12V	80	2.9kHz	Continuous & Slow Pulse



BUZZERS

1.Scope

This specification is applied to Magnetic Buzzer(Self-Drive Type)

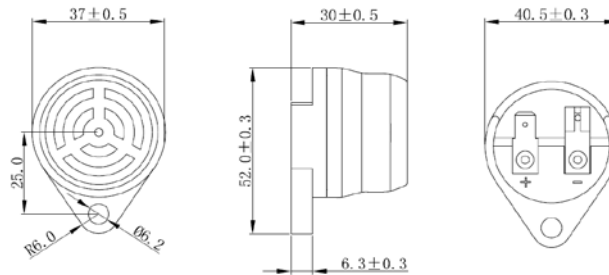
The product described below is used in various alarm systems.

2.Basic Condition

- 2.1 Rated Voltage:12VDC
- 2.2 Operating Voltage:8~16VDC
- 2.3 Operating Temperature Range:-20°C ~+70°C
- 2.4 Storage Temperature Range:-30°C~+85°C

3.Electrical Characteristics

- 3.1 Sound Press Level: $\geq 95\text{dB}$ at 30cm / 12VDC
- 3.2 Consumption Current: $\leq 30\text{mA}$ at 12VDC
- 3.3 Resonate Frequency: $400\text{Hz} \pm 100\text{Hz}$
- 3.4 Tone Nature: Continuous Sound
- 3.5 Material: ABS



1.Scope

This specification is applied to Magnetic Buzzer(Self-Drive Type)

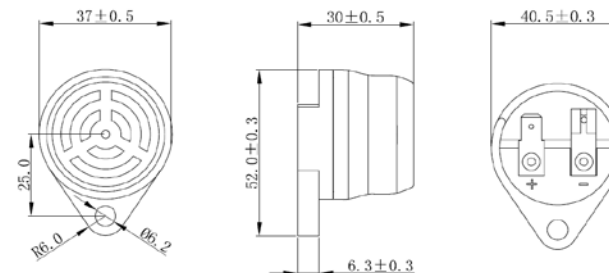
The product described below is used in various alarm systems.

2.Basic Condition

- 2.1 Rated Voltage:24VDC
- 2.2 Operating Voltage:20~28VDC
- 2.3 Operating Temperature Range:-20°C ~+70°C
- 2.4 Storage Temperature Range:-30°C~+85°C

3.Electrical Characteristics

- 3.1 Sound Press Level: $\geq 95\text{dB}$ at 30cm / 24VDC
- 3.2 Consumption Current: $\leq 30\text{mA}$ at 24VDC
- 3.3 Resonate Frequency: $400\text{Hz} \pm 100\text{Hz}$
- 3.4 Tone Nature: Continuous Sound
- 3.5 Material: ABS



1.Scope

This specification is applied to Piezo Buzzer (Self-Drive Type)

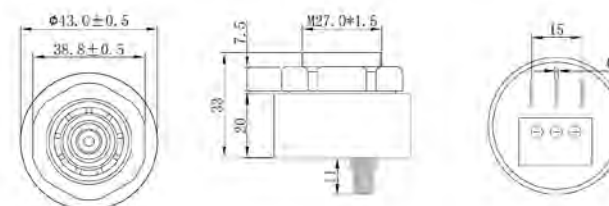
The product described below is used in various alarm systems.

2.Basic Condition

- 2.1 Rated Voltage:12VDC
- 2.2 Operating Voltage:6~28VDC
- 2.3 Operating Temperature Range:-20°C~+70°C
- 2.4 Storage Temperature Range:-30°C~+85°C

3.Electrical Characteristics

- 3.1 Sound Press Level: $\geq 80\text{dB}$ at 60cm / 12VDC
- 3.2 Consumption Current: $\leq 20\text{mA}$ at 12VDC
- 3.3 Resonate Frequency: $2900\text{Hz} \pm 500\text{Hz}$
- 3.4 Tone Nature: Continuous Sound & Fast Pulse Sound (260±20/minute)
- 3.5 Material: ABS Black



MEDIUM DUTY REVERSE ALARMS



AVR50 12-24V COMMERCIAL



Reverse alarm 12-24v operation, waterproof

- Medium Duty
- CE & emc marked
- Epoxy sealed for greater durability against water and vibration
- M.I.R.A. tested for all applications
- Pressure washable – IP67

Suitable for: Commercial vehicles



AVR55 / AVR57 12-24V COMMERCIAL



Reverse alarm 12-24v operation c/w bracket Night silent reverse alarm

- Medium Duty
- CE & emc marked
- With 3rd orange lead (Night Silent)
- Epoxy sealed for greater durability against water and vibration
- M.I.R.A. tested for all applications
- Pressure washable – IP67

Suitable for: Light commercial vehicles



AVR60 / AVR60-3 12-100V ELECTRIC VEHICLE



12-100v operation ideal for electrical vehicles Night silent

- CE & emc marked
- With 3rd orange lead (Night Silent) mutes the unit when the side lights are in use
- Epoxy sealed for greater durability against water and vibration
- M.I.R.A. tested for all applications
- Pressure washable – IP67

Suitable for: Fork trucks and electric vehicles



AVR70 12-100V



Reverse alarm 12-100 volts

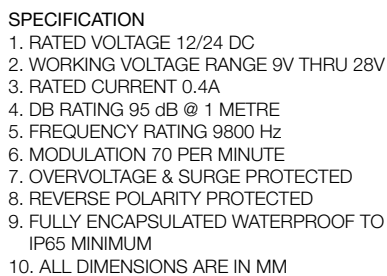
Suitable for: Fork trucks and electric vehicles.



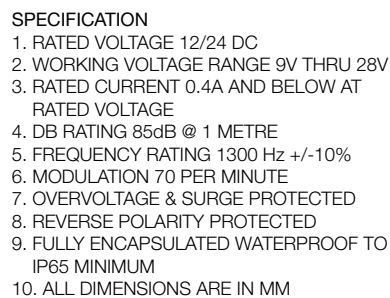
- CE & emc marked
- Epoxy sealed for greater durability against water and vibration
- M.I.R.A. tested for all applications
- Pressure washable – IP67

Technical specifications

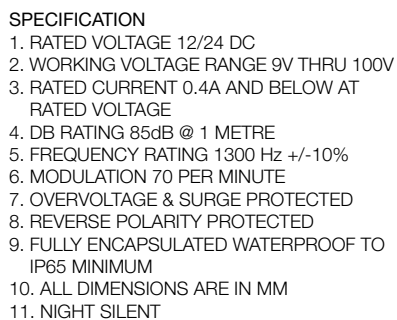
Product	Volts	dB level	Frequency	Current	Size	Fixing
AVR50	12-24	95 dB	980 Hz	0.25 A	66 x 70	Bracket
AVR55	12-24	85 dB	1300 Hz	0.4 A	56 x 50 x 76	Bracket
AVR57	12-24	88 dB	1300 Hz	0.4 A	56 x 50 x 76	Bracket
AVR60	12-100	88 dB	1300 Hz	0.4 A	61 x 52	Single Bolt
AVR60-3	12-100	88 dB	1300 Hz	0.4 A	61 x 52	Single Bolt
AVR70	12-100	92 dB	900 Hz	0.4 A	67 x 101 x 45	Bracket



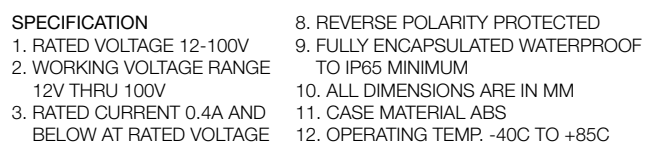
DRAWING NO: AVR50
CUSTOMER PART NO:
CUSTOMER:
AMBER VALLEY DEVELOPMENTS LTD



DRAWING NO: AVD - AVR55
CUSTOMER PART NO:
CUSTOMER:
AMBER VALLEY DEVELOPMENTS LTD



DRAWING NO: AVD - AVR60-3
CUSTOMER PART NO:
CUSTOMER:
AMBER VALLEY DEVELOPMENTS LTD



DRAWING NO: AVD - AVR70
CUSTOMER PART NO:
CUSTOMER:
AMBER VALLEY DEVELOPMENTS LTD

MEDIUM DUTY REVERSE ALARMS



AVR70-3 12-100V



As AVR 70 but supplied with extra lead for night silent operation

- With 3rd orange lead (night silent) mutes the unit when the side lights are in use

Suitable for: Fork trucks and electric vehicles.



AVR70R2 12-100V



12-100 volt Select reverse twice

- Select reverse twice mute facility

Suitable for: Fork trucks and electric vehicles.



AVR70SA 12-48V



12-48 volt Self adjusting alarm

- 5 dB above ambient noise

Suitable for: Trucks, coaches, buses and plant.



AVR71 12-24V



12-24 volt as AVR70 but supplied with two power studs in place of flying leads

- Stud Fix

Suitable for: Trucks, coaches, buses and plant.



AVR70 (102DB)

AVR70 (107DB)



Reverse alarm 12-24 volts

Suitable for: Fork trucks and electric vehicles.



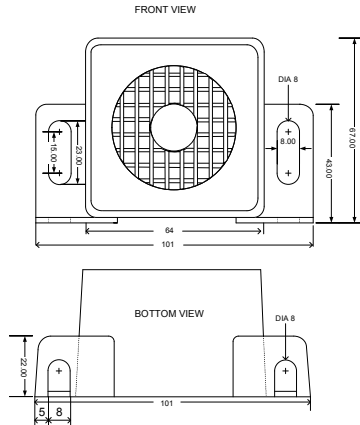
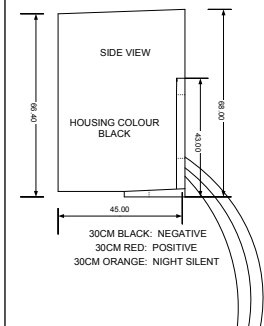
- CE & emc marked
- Epoxy sealed for greater durability against water and vibration
- M.I.R.A. tested for all on and off road applications
- Pressure washable – IP67
- with 3rd orange lead (night silent) mutes the unit when the side lights are in use

Technical specifications

Product	Volts	dB level	Frequency	Current	Size	Fixing
AVR70-3	12-100	92 dB	900 Hz	0.4 A	67 x 101 x 45	Bracket
AVR70R2	12-100	92 dB	900 Hz	0.4 A	67 x 101 x 45	Bracket
AVR70SA	12-48	72-89 dB	900 Hz	0.4 A	67 x 101 x 45	Bracket
AVR71	12-24	92 dB	900 Hz	0.4 A	67 x 101 x 45	Bracket
AVR70 (102DB)	12-24	102 dB	900 Hz	0.4 A	67 x 101 x 45	Bracket
AVR70 (107DB)	12-24	107 dB	900 Hz	0.4 A	67 x 101 x 45	Bracket



MEDIUM DUTY REVERSE ALARMS



SPECIFICATION

1. RATED VOLTAGE 12-100V
2. WORKING VOLTAGE RANGE 12V THRU 100V
3. RATED CURRENT 0.4A AND BELOW AT RATED VOLTAGE
4. MINIMUM DB RATING 92dB @ 1 METRE
5. FREQUENCY RATING 900 Hz +/-10%
6. MODULATION 70 PER MINUTE
7. OVERVOLTAGE & SURGE PROTECTED
8. REVERSE POLARITY PROTECTED

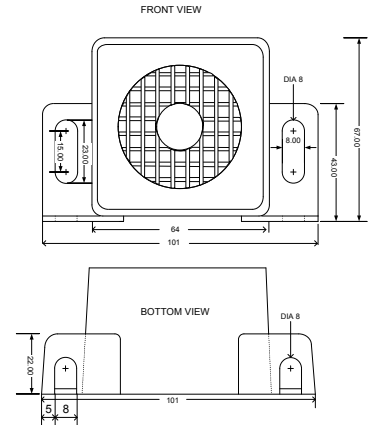
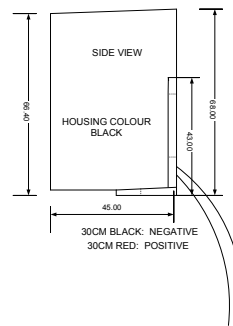
9. FULLY ENCAPSULATED WATERPROOF TO IP65 MINIMUM
10. ALL DIMENSIONS ARE IN MM
11. CASE MATERIAL ABS
12. OPERATING TEMP. -40C TO +85C
13. NIGHT SILENT THRU ORANGE WIRE

DRAWING NO:
AVD - AVR70-3

CUSTOMER PART NO:

CUSTOMER:

AMBER VALLEY DEVELOPMENTS LTD



SPECIFICATION

1. RATED VOLTAGE 12-100V
2. WORKING VOLTAGE RANGE 12V THRU 100V
3. RATED CURRENT 0.4A AND BELOW AT RATED VOLTAGE
4. MINIMUM DB RATING 92dB @ 1 METRE
5. FREQUENCY RATING 900 Hz +/-10%
6. MODULATION 70 PER MINUTE
7. OVERVOLTAGE & SURGE PROTECTED
8. REVERSE POLARITY PROTECTED

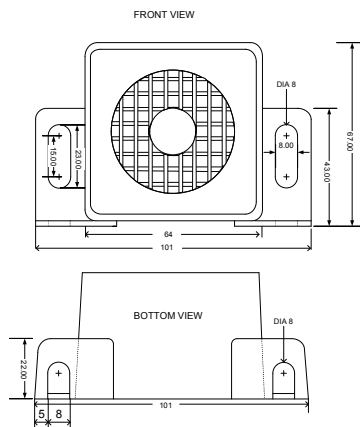
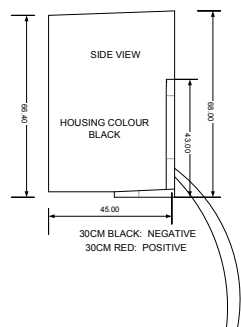
9. FULLY ENCAPSULATED WATERPROOF TO IP65 MINIMUM
10. ALL DIMENSIONS ARE IN MM
11. CASE MATERIAL ABS
12. OPERATING TEMP. -40C TO +85C

DRAWING NO:
AVD - AVR70R2

CUSTOMER PART NO:

CUSTOMER:

AMBER VALLEY DEVELOPMENTS LTD



SPECIFICATION

1. RATED VOLTAGE 12-48V
2. WORKING VOLTAGE RANGE 12V THRU 48V
3. RATED CURRENT 0.4A AND BELOW AT RATED VOLTAGE
4. MINIMUM DB RATING 72-89dB @ 1 METRE
5. FREQUENCY RATING 900 Hz +/-10%
6. MODULATION 70 PER MINUTE
7. OVERVOLTAGE & SURGE PROTECTED
8. REVERSE POLARITY PROTECTED

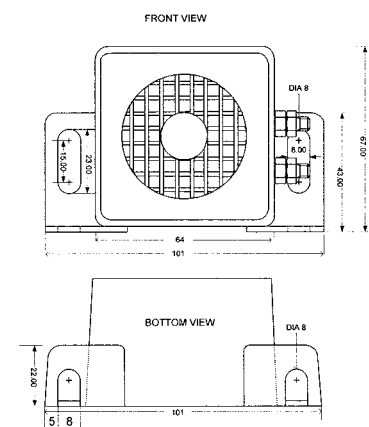
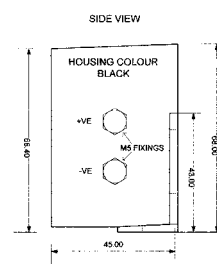
9. FULLY ENCAPSULATED WATERPROOF TO IP65 MINIMUM
10. ALL DIMENSIONS ARE IN MM
11. CASE MATERIAL ABS
12. OPERATING TEMP. -40C TO +85C

DRAWING NO:
AVD - AVR70SA

CUSTOMER PART NO:

CUSTOMER:

AMBER VALLEY DEVELOPMENTS LTD



SPECIFICATION

1. RATED VOLTAGE 12/24 DC
2. WORKING VOLTAGE RANGE 12V THRU 24V
3. RATED CURRENT 0.4A AND BELOW AT RATED VOLTAGE
4. MINIMUM DB RATING 72dB @ 1 METRE
5. FREQUENCY RATING 900 Hz +/-10%
6. MODULATION CONTINUOUS
7. OVERVOLTAGE & SURGE PROTECTED
8. REVERSE POLARITY PROTECTED

9. FULLY ENCAPSULATED WATERPROOF TO IP65 MINIMUM
10. ALL DIMENSIONS ARE IN MM
11. CASE MATERIAL ABS
12. OPERATING TEMP. -40C TO +85C

DRAWING NO:
AVD - AVR71

CUSTOMER PART NO:

CUSTOMER:

AMBER VALLEY DEVELOPMENTS LTD

HEAVY DUTY REVERSE ALARMS



AVR80 12-24V COMMERCIAL



Light Commercial and Fork Trucks

Suitable for: Trucks, coaches, buses and plant.



AVR81 12-24V COMMERCIAL



Night Silent

- With 3rd orange lead (night silent) mutes the unit when the side lights are in use

Suitable for: Trucks, coaches, buses and plant.



AVR90 12-24V COMMERCIAL



Night Silent and Night Silent Override

Suitable for: Trucks, coaches, buses, fork trucks, electric vehicles and plant.



AVR90TKR 12-24V COMMERCIAL AVR91TKR 12-24V COMMERCIAL



Petrol Tanker (AVR91TKR armoured cable)

This unit features night silent and override. This unit is fitted with a Mounting Boss and (AVR91TKR) has 1m of armoured cable.

Suitable for: Tankers.



AVR90R2 12-24V COMMERCIAL



Reverse Twice

- Can be muted by selecting reverse gear twice in quick succession

Suitable for: Trucks, coaches, buses.



All the above units are:

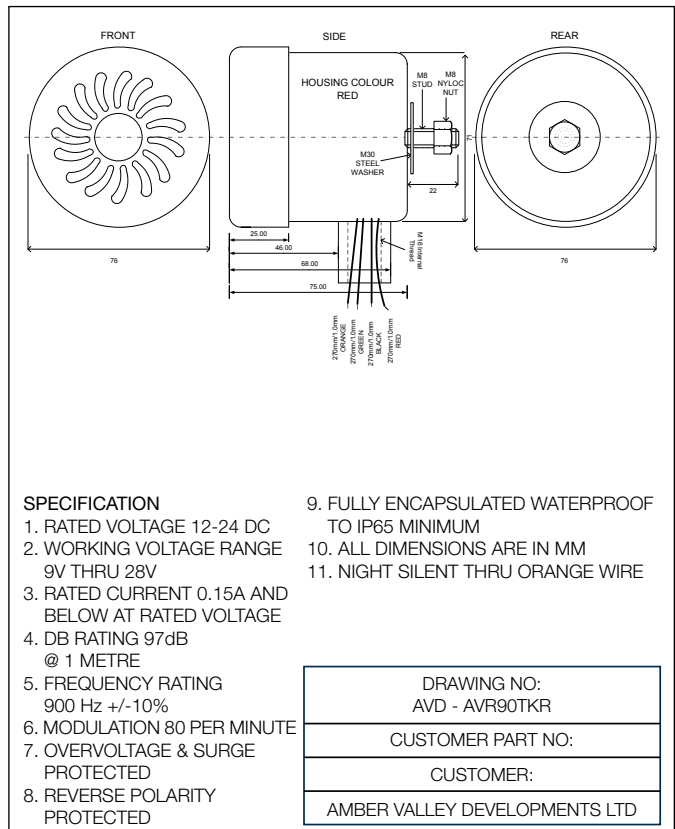
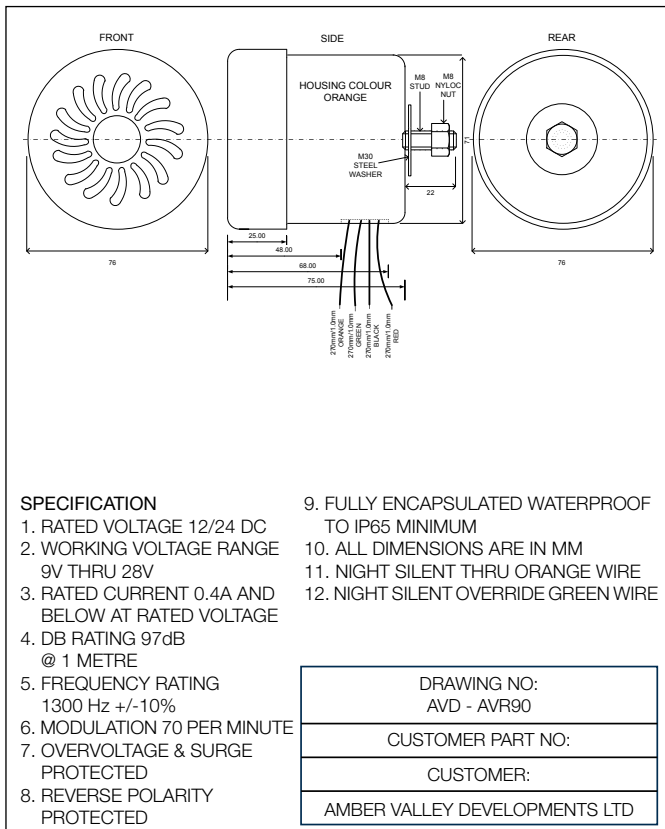
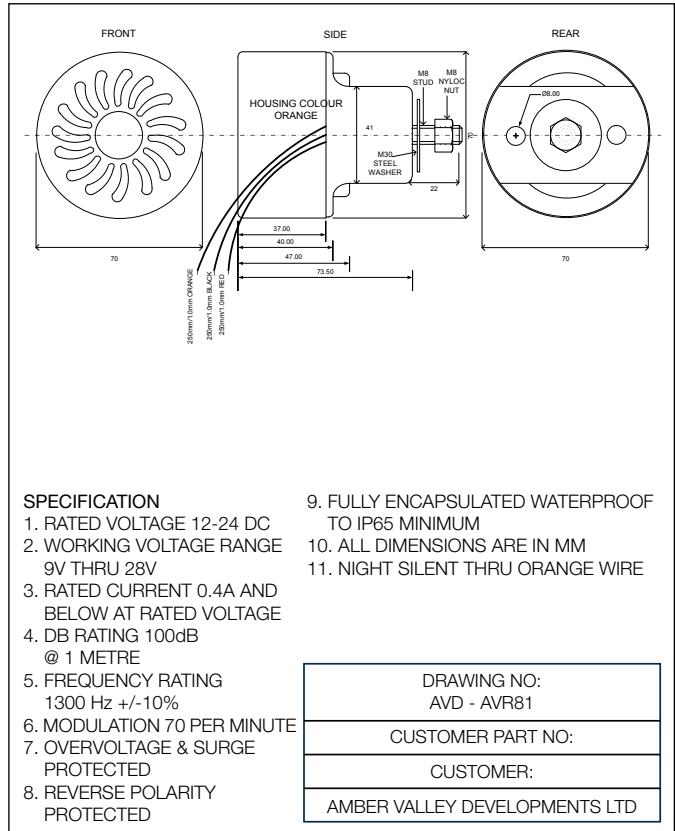
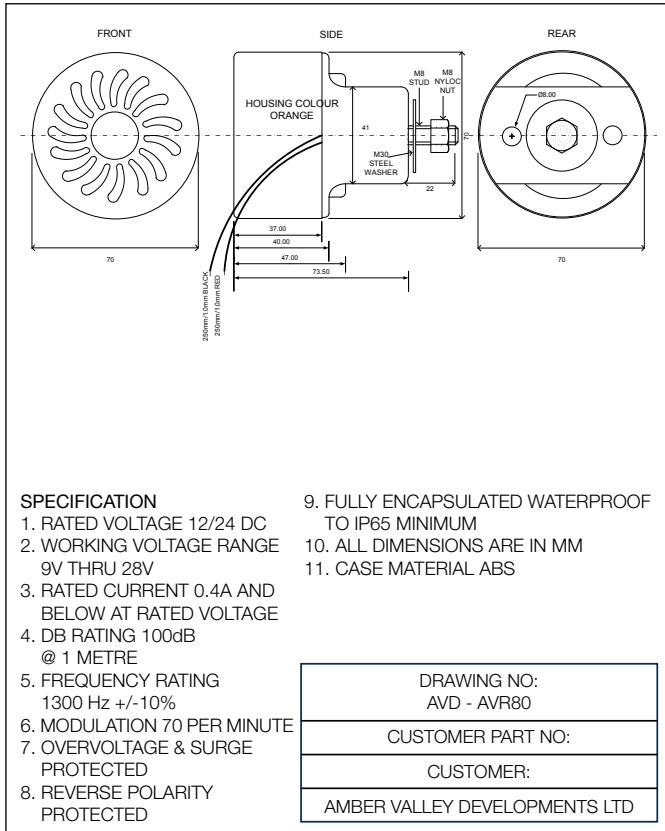
- CE & emc marked
- Sonic welded and epoxy sealed for greater durability against water and vibration
- M.I.R.A. tested for all on and off road applications
- Pressure washable – IP67

Technical specifications

Product	Volts	dB level	Frequency	Current	Size	Fixing
AVR80	12-24	100 dB	2500 Hz	0.25 A	70 (D) x 73.5	Single Bolt
AVR81	12-24	100 dB	2500 Hz	0.25 A	70 (D) x 73.5	Single Bolt
AVR90	12-24	97 dB	980 Hz	0.25 A	76 (D) x 75	Single Bolt
AVR90TKR	12-24	97 dB	980 Hz	0.25 A	75 x 76	Single Bolt
AVR91TKR	12-24	97 dB	980 Hz	0.25 A	75 x 76	Single Bolt
AVR90R2	12-24	97 dB	980 Hz	0.25 A	75 x 76	Single Bolt



HEAVY DUTY REVERSE ALARMS



SELF-ADJUSTING ALARM

AVRWN01SA 87-97dB

AVRWN02SA 97-105dB



* Also available with Black housing

White Noise Alarm

- 2-Bolt Fixing
- CE and emc marked
- Epoxy sealed for greater durability against water and vibration
- Pressure washable – IP67
- M.I.R.A. tested and approved for all on and off road applications
- Measures ambient noise levels and automatically adjusts to at least 5dB above the ambient noise level

Both Suitable for: Trucks, Coaches, Buses & Plant



AVR1BSA 82-102dB



Beeping Alarm

- 2-Bolt Fixing
- CE and emc marked
- Epoxy sealed for greater durability against water and vibration
- Pressure washable – IP67
- M.I.R.A. tested and approved for all on and off road applications
- Measures ambient noise levels and automatically adjusts to at least 5dB above the ambient noise level

Both Suitable for: Trucks, Coaches, Buses & Plant



AVR70SA 87-92dB



Self Adjusting Reverse Alarm

- 2-Bolt Fixing
- CE and emc marked
- Epoxy sealed for greater durability against water and vibration
- Pressure washable – IP67
- M.I.R.A. tested and approved for all on and off road applications
- Measures ambient noise levels and automatically adjusts to at least 5dB above the ambient noise level

Both Suitable for: Trucks, Coaches, Buses & Plant



AVR90SA 12-24V COMMERCIAL



Self Adjusting Reverse Alarm

This unit listens between bleeps and automatically adjusts itself to be 5dB above the ambient noise.

- Single Bolt Fixing
- CE and emc marked
- Epoxy sealed for greater durability against water and vibration
- Pressure washable – IP67
- M.I.R.A. tested for all on and off road applications
- Measures ambient noise levels and automatically adjusts to at least 5 dB above the ambient noise level

Technical specifications

Product	Volts	dB level	Frequency	Current	Size	Fixing
AVRWN01SA	12-24	87-97 dB	Variable	400mA@12V		2-Bolt
AVRWN02SA	12-24	97-105 dB	Variable	400mA@12V		2-Bolt
AVR1BSA	12-24	82-102 dB	2300 Hz	400mA@12V		2-Bolt
AVR70SA	12-24	87-92 dB	980 Hz	0.65 A	67 x 101 x 45	2-Bolt
AVR90SA	12-24	87-92 dB	980 Hz	0.65 A	75 x 76	Single Bolt

PLANT ALARMS HEAVY DUTY



AVR100 12-24V

Plant Alarm

- Pressure washable
- Dual voltage
- Waterproof - IP67
- Tested and approved at M.I.R.A. for on and off highway

AVR100SA 12-24V

Self Adjusting Plant Alarm

- Pressure washable
- Dual voltage
- Waterproof - IP67
- Tested and approved at M.I.R.A. for on and off highway

AVR100R2 12-24V

Reverse Twice Plant Alarm

- Pressure washable
- Dual voltage
- Waterproof - IP67
- Tested and approved at M.I.R.A. for on and off highway
- Select reverse twice mute facility

AVR100CT 12-24V

Constant Tone Plant Horn

- Pressure washable
- Dual voltage
- Waterproof - IP67
- Tested and approved at M.I.R.A. for on and off highway

ALL Suitable for: Plant.



All of our units are speaker driven which most people agree is the best option for a sounder.

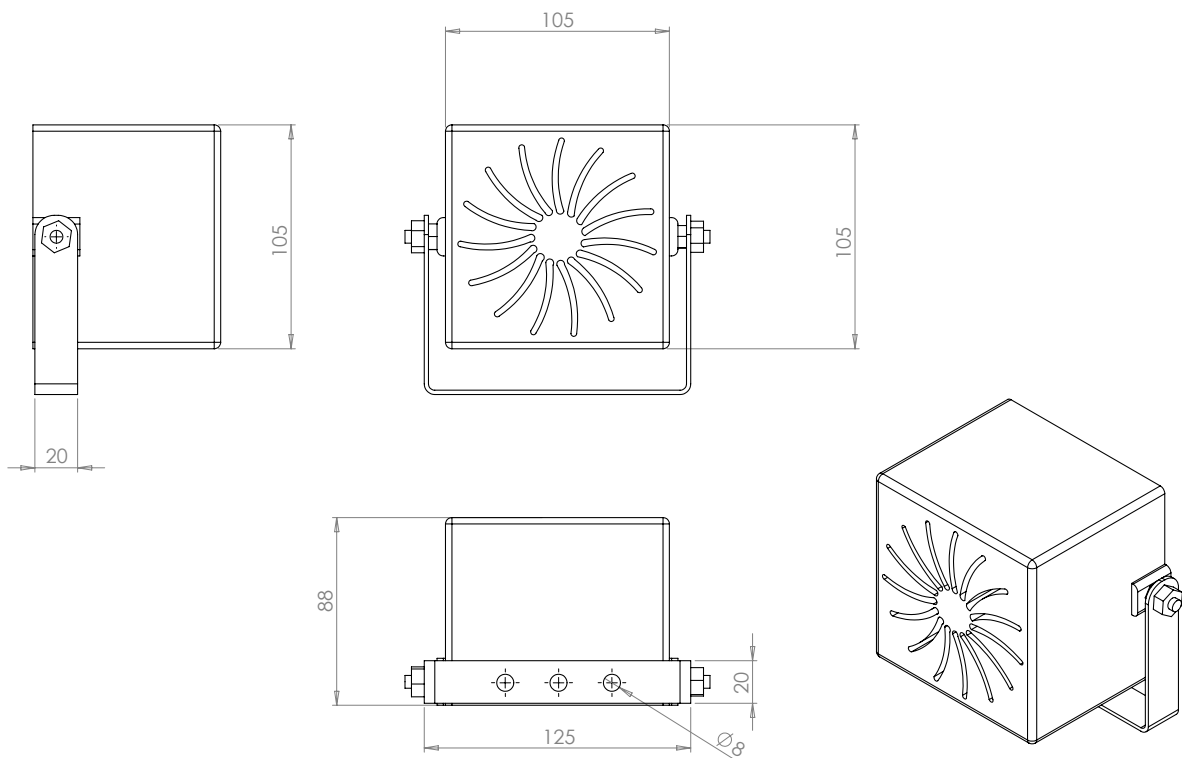
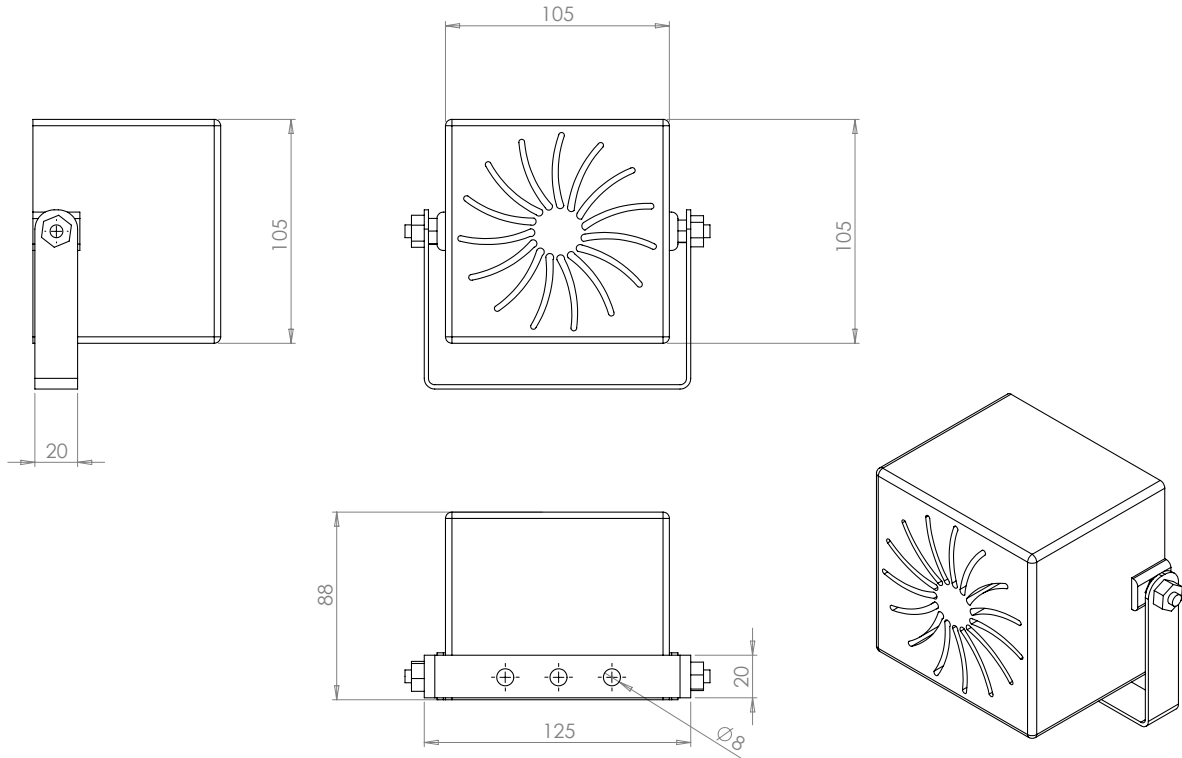
All our speakers are Mylar (plastic) cone with a solid metal back making full encapsulation simple and thereby making a totally sealed unit.

Technical specifications

Product	Volts	dB level	Frequency	Current	Size	Fixing
AVR100	12-24	110 dB	1200 Hz	0.45 A	105 x 150 x 120	Bracket
AVR100SA	12-24	96-110 dB	1200 Hz	0.45 A	105 x 150 x 120	Bracket
AVR100R2	12-24	110 dB	1200 Hz	0.45 A	105 x 150 x 120	Bracket
AVR100CT	12-24	110 dB	1200 Hz	0.45 A	75 x 76	Single Bolt



PLANT ALARMS HEAVY DUTY



CONSTANT TONE ALARMS



AVR70CT 12-80V



12-80 volt Constant Tone Alarm

Ideal for use as a forward horn

- CE & emc marked
- Epoxy sealed for greater durability against water and vibration
- M.I.R.A. tested for all on and off road applications
- Pressure washable - IP67
- Ideal for forward horn operation

Suitable for: Fork trucks and electric vehicles.



AVR90PL 12-24V



Plant Alarm and Horn combined

The AVR90PL was designed for a major plant manufacturer where a horn was fitted to the front and rear of the vehicle. The green lead makes the unit sound continuously thereby eliminating the need for the rear horn and making a saving in materials and labour.

- CE and emc marked
- Pressure washable - IP67
- Waterproof
- M.I.R.A. tested for on and off highway

Suitable for: Digger, dumper trucks.



AVR90FT 24-100V COMMERCIAL



Alarm and Horn Combined

Specifically designed for electrically operated vehicles up to 100V. This unit has 3 leads. The green lead makes the unit continuous, allowing it to be used for many different functions.

- Dual voltage 24-100 volts
- Pressure washable - IP67
- Waterproof

Suitable for: Trucks, coaches, buses, fork trucks, plant and electric vehicles.



AVR90TT 12-24V COMMERCIAL



Triple Tone

This unit was originally designed to suit the requirements of a specific fleet where trucks and fork trucks operated together. The Triple Tone Alarm was specified for the trucks so any one in the vicinity could differentiate between the truck and the fork truck. This unit tone has been so successful that it has been specified by various vehicle manufacturers also.

- CE and emc marked
- Pressure washable - IP67
- Waterproof
- M.I.R.A. tested for on and off highway
- Night Silent and Override

Suitable for: Trucks

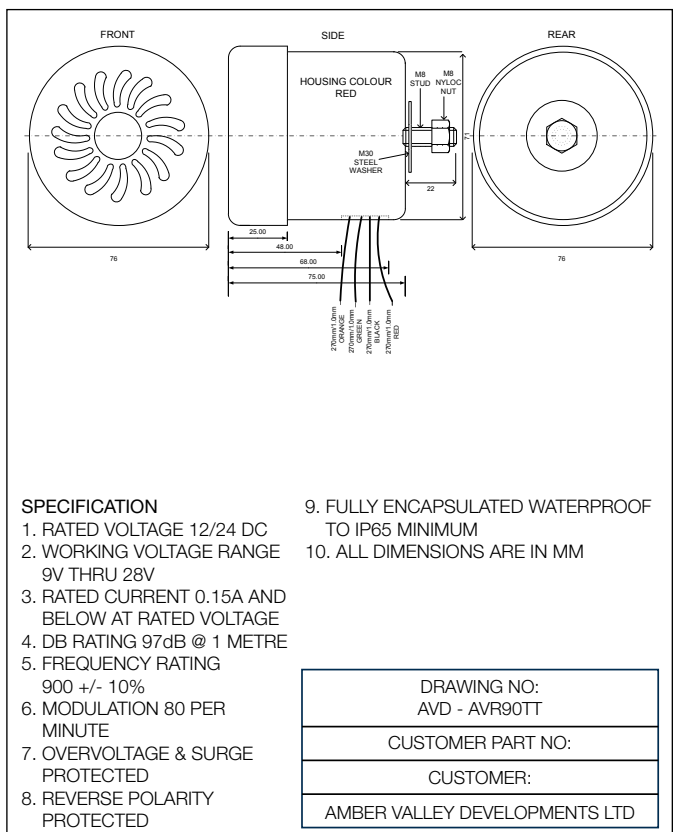
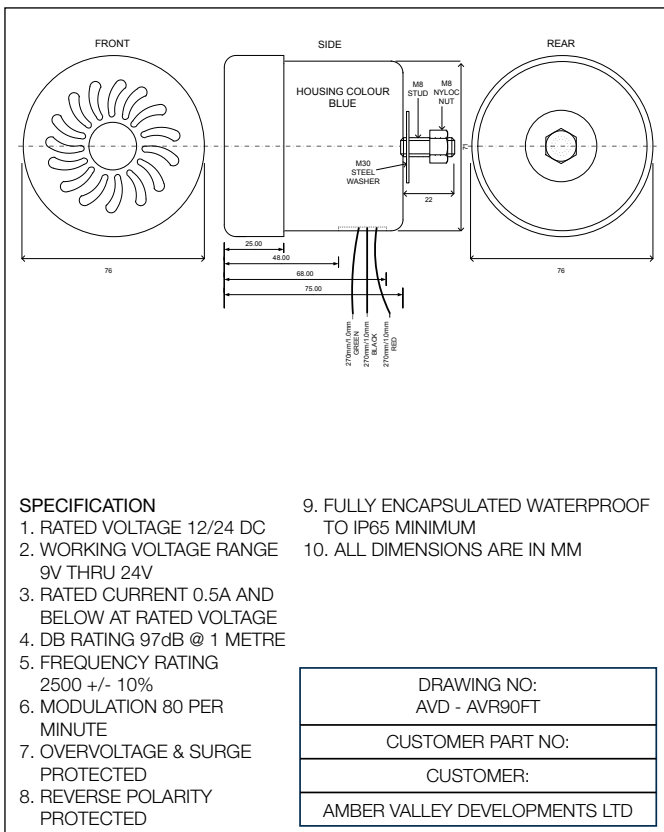
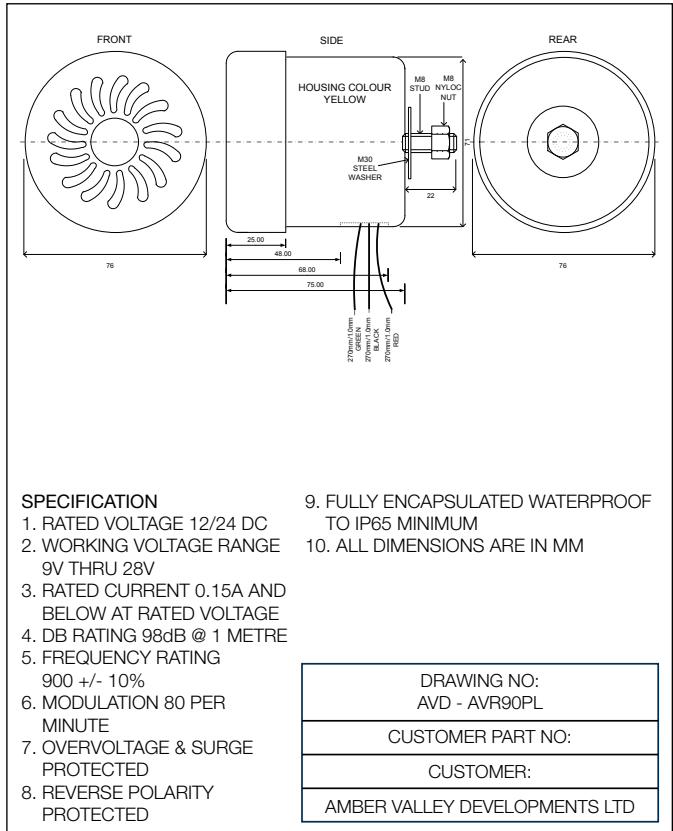
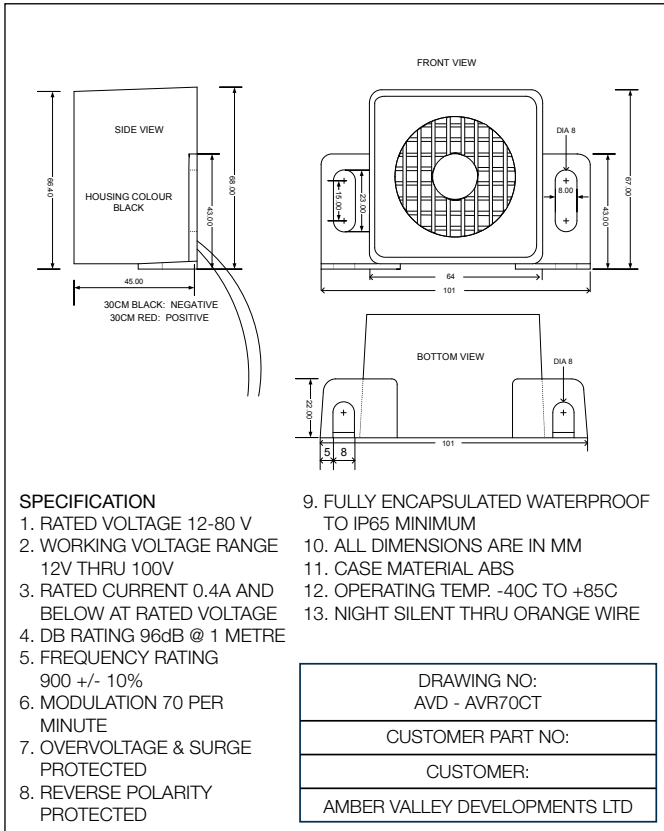


Technical specifications

Product	Volts	dB level	Frequency	Current	Size	Fixing
AVR70CT	12-80	96 dB	900 Hz	0.4 A	67 x 101 x 45	Bracket
AVR90PL	12-24	98 dB	980 Hz	0.25 A	75 x 76	Single Bolt
AVR90FT	24-100	97 dB	980 Hz	0.25 A	75 x 76	Single Bolt
AVR90TT	12-24	97 dB	Multi	0.25 A	75 x 76	Single Bolt



CONSTANT TONE ALARMS



SPECIAL TONE ALARMS

AVR90BT 12-24V COMMERCIAL



Bell Tone

This unit was designed to have a bell tone, a noise which does not travel far causing less noise pollution. This unit is night silent and night silent override.

- Single Bolt Fixing
- CE and emc marked

- Pressure washable - IP67
- Waterproof
- M.I.R.A. tested for on and off highway

AVR90BT technical specification

Volts	dB level	Frequency	Current	L x Dia	Fixing
12-24	95 dB	Bell	0.5 A	75 x 76	Single Bolt

Suitable for: Trucks, coaches, buses and plant.



AVR100CT 12-24V HEAVY DUTY



Constant Tone Plant Horn

- Pressure washable
- Dual voltage
- Waterproof - IP67
- Tested and approved at M.I.R.A. for on and off highway
- Select reverse twice mute facility

AVR100CT technical specification

Volts	dB level	Frequency	Current	H x W x D	Fixing
12-24	110 dB	1200 Hz	0.45 A	105 x 150 x 120	Bracket

Suitable for: Plant.

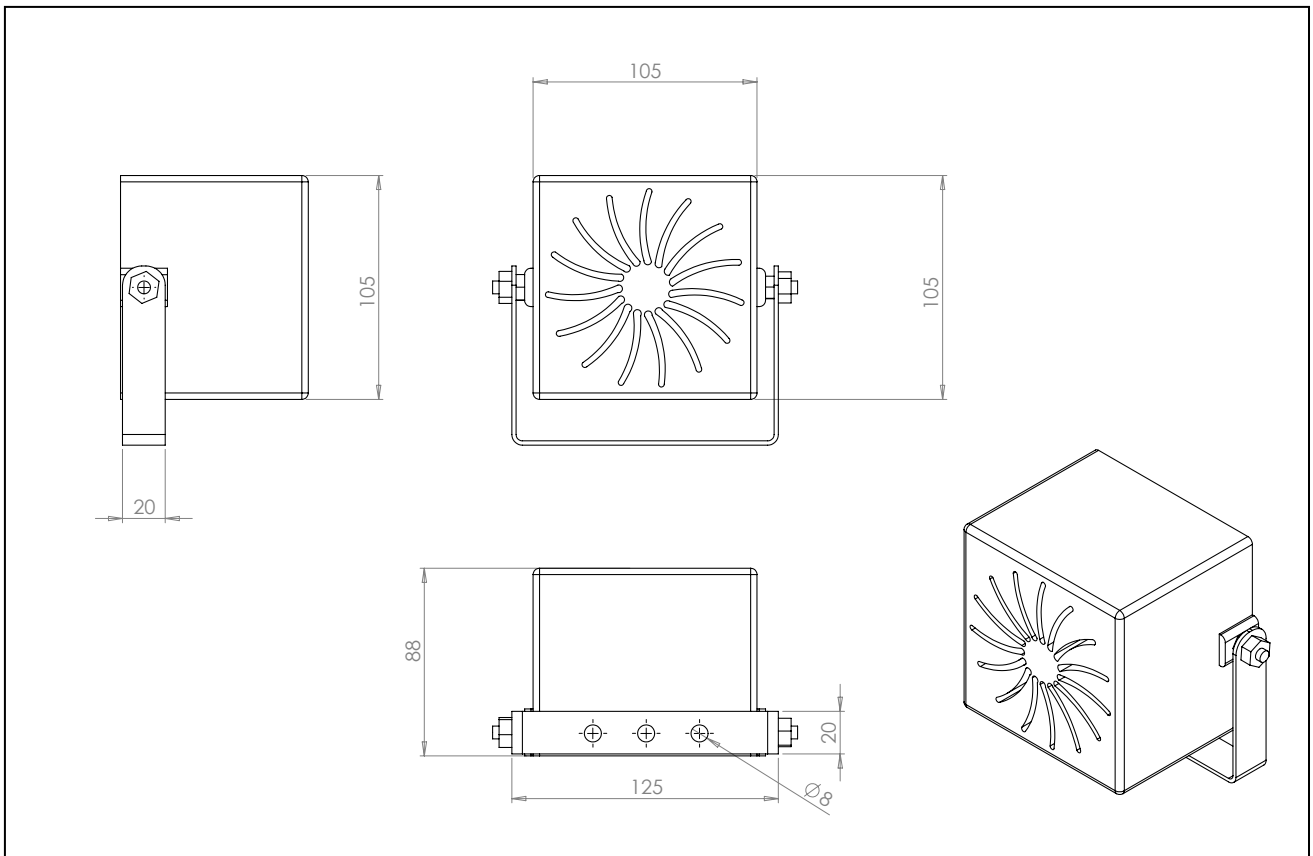
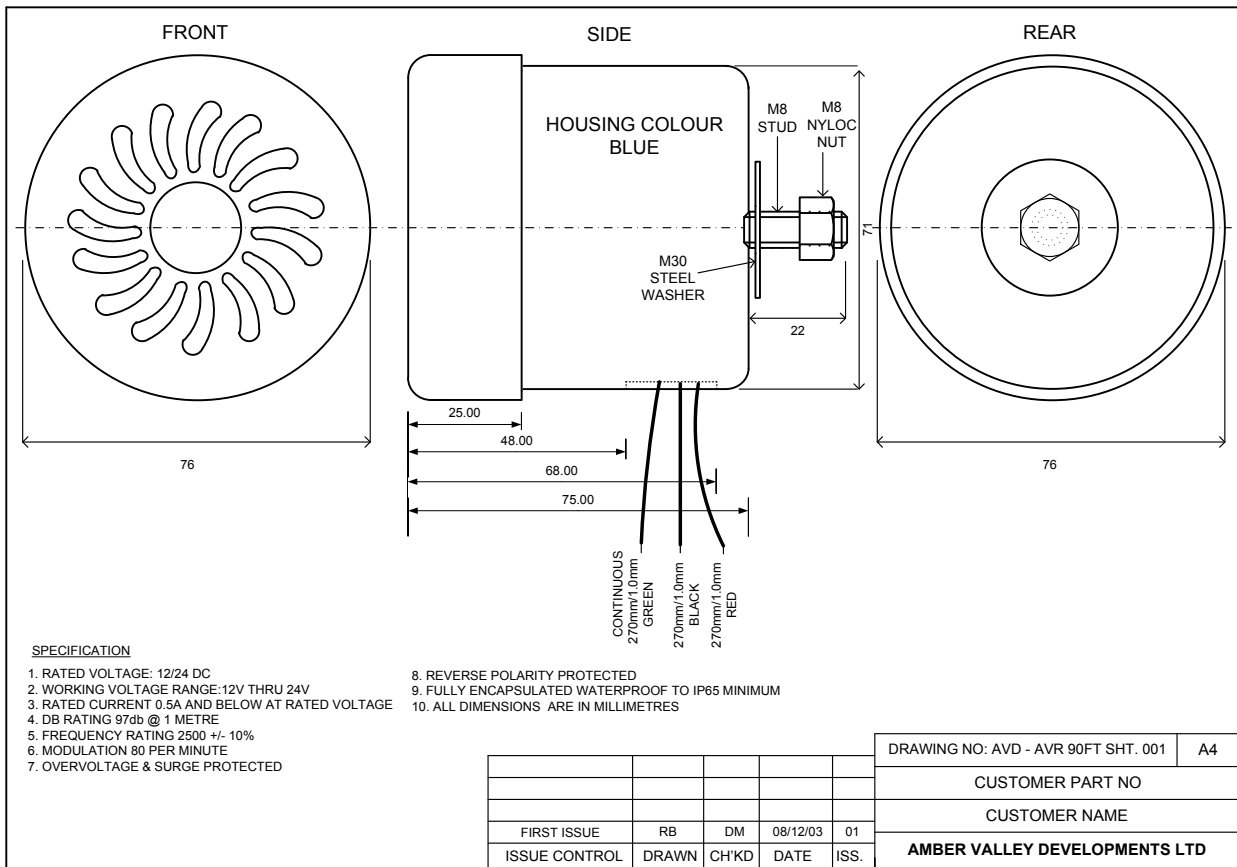


All of our units are speaker driven which most people agree is the best option for a sounder.

All our speakers are Mylar (plastic) cone with a solid metal back making full encapsulation simple and thereby making a totally sealed unit.



SPECIAL TONE ALARMS





“If only he had heard clearly then this could have been avoided.”

In an effort to reduce noise pollution, we have come up with a number of options for consideration. The difficulty is alerting people to danger while not disturbing people outside the danger zone; and also in a multi-vehicle situation, assisting people in danger to locate where the warning is coming from.

The best and most effective is a low frequency beep (does not travel) and a spoken message that says exactly what is happening, as there is nothing more directional than speech.

Alternatively for customers who prefer a beep or multi-beep as traditionally used, we can have a daytime frequency and a much lower frequency and dB level for night time so that the warning is much more localised.

Finally we have our range of Ecolarms®. These use a wide variety of computer generated sounds to alert in a fashion designed not to be intrusive.

Our shush-shush alarm is also available, however it is manufactured at our Portuguese facility and only available in certain countries around the world at the moment.

The most popular unit we are making in the non-beeping range is
THE SHRIEK OF THE SPHINX range.

It has a new computer generated sound which has been extensively researched and
we believe it is a vast improvement on pure white noise or multiband (fixed) alarms.

This alarm, when accompanied by the spoken message, is without doubt the most effective audible reversing alarm on the market.



LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de la Mobilité
et des Travaux publics

Département de la mobilité
et des transports

Registre de Commerce: B 27180



L-5201 Sandweiler

Référence: E13*10R05/01*15254*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 09 septembre 2019

Communication concernant:⁽²⁾
Communication concerning:



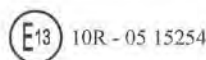
- la délivrance d'une homologation
approval granted
- l'extension d'homologation
approval extended
- le refus d'homologation
approval refused
- le retrait d'homologation
approval withdrawn
- l'arrêt définitif de la production
production definitely discontinued

d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of electric/electronic sub-assembly with regard to Regulation N° 10

Numéro d'homologation par type:
Approval number:

E13*10R05/01*15254*00

Marque d'homologation:
Approval mark:



1. **Fabricant: (marque commerciale du constructeur):**
Make (trade name of manufacturer):

Amber Valley Developments LLP

2. **Type:**
Type:

Standard Alarm (OZ1015d)

Dénomination(s) commerciale(s) générale(s):
General commercial description(s):

Standard Alarm (OZ1015d)

Version(s)/Variante(s):
Version(s)/Variant(s):

01315095, 030140, 030142, 0409012,
05050019, 1004627, 1004628, 1004636,
160481, 160482, 20385, 20386, 20387,
20388, 20389, 30/184, 40004595, 400-10683,
400-10920, 40950226/2, 97702730, A8840,
AVMA85, AVP03, AVP04, AVR100, AVR100CT,
AVR100MH, AVR100R2, AVR70-3SB, AVR70SB,
AVR70TT, AVR75-3SB, AVR75SB, AVR80(90),
AVR80(90)BRKT, AVR80/90(800), AVR80DC,
AVR80MONTRACON, AVR81(90),
AVR81(90)IM, AVR81C, AVR81VT, AVR90,
AVR901M, AVR902M, AVR90DC,
AVR90DONBUR, AVR90PL, AVR90R2,
AVR90TKR, AVR90TKR(R2), AVR90TT,

AVRWN01 83dB

AVRWN02 88dB

The ECOLARM® is kind to the environment being partly made of recycled material.



* Also available with Black housing

Non-bleeping multi-frequency sound

- Soft tone alarm ideal for built up areas where noise pollution may be an issue
- All units are Night Silent and Override

Suitable for: Trucks, coaches, buses, rigid bodies, articulated trailers.



AVRWN03 92dB

AVRWN04 98dB



* Also available with Black housing

Non-bleeping multi-frequency sound

- Soft tone alarm ideal for built up areas where noise pollution may be an issue
- All units are Night Silent and Override

Suitable for: Trucks, coaches, buses, rigid bodies, articulated trailers.



NEW R2 Version

AVRWN02R2 88dB

AVRWN04R2 92dB



* Also available with Black housing

Non-bleeping multi-frequency sound

- Soft tone alarm ideal for built up areas where noise pollution may be an issue
- Double engage reverse to mute

Both Suitable for: Trucks, coaches, buses, rigid bodies, articulated trailers.



Technical specifications

Product	Volts	dB level	Frequency	Current
AVRWN01/02	12-24	83 / 88 dB	White Noise	0.50 mA
AVRWN03/04	12-24	92 / 98 dB	White Noise	0.50 mA
AVRWN02R2	12-24	88 dB	White Noise	0.50 mA
AVRWN04R2	12-24	92 dB	White Noise	0.50 mA

TALKING ALARMS



“If only she had understood then this would have been avoided.”

Probably the safest type of warning system because of its unique directional qualities and the ability to say exactly what the danger is. These alarms are available as standalone alarms such as, “Stand well clear, vehicle reversing,” to complete systems where we provide the complete solution. The most popular examples are:

“Handbrake not applied” – which is activated when the driver’s door is opened and the handbrake is not on. It works regardless of whether the ignition is on or not.

Seatbelt alarm

There are several systems in our range for this alarm, one which gives the message twice when the bus door closes, the second time louder and with more authority. Ideally suited to school buses.

The second takes its feed from the electrical buckle on the seatbelt. If there is not an electrical buckle fitted, we have a specially designed reed switch to activate the alarm.

“Diesel fuel only”

This is becoming more popular, especially on light commercial vehicles. When the fuel flap is opened the alarm says, “Diesel fuel only,” as putting petrol into a diesel vehicle costs thousands of pounds.

Bespoke messages in any language

All we require is the message in any language in a WAV file to be emailed to us and we will make the required alarm, usually within 2 to 3 days, using the exact message and voice as we receive it. This is especially important in English speaking countries where accents are critical. After all, a New Zealander or Australian does not want a message in an Oxford English accent as the local people would not immediately respond to it.

dB level

The dB level shown for the talking alarms denotes the speech level and not the beep dB, which will be higher.



Ministère de la Mobilité
et des Travaux publics

Département de la mobilité
et des transports

Registre de Commerce: B 27180

L-5201 Sandweiler



Référence: E13*10R05/01*14987*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 18 janvier 2019

Communication concernant:⁽²⁾
Communication concerning:



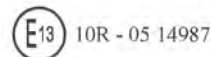
- la délivrance d'une homologation
approval granted
- l'extension d'homologation
approval extended
- le refus d'homologation
approval refused
- le retrait d'homologation
approval withdrawn
- l'arrêt définitif de la production
production definitely discontinued

d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of electrical/electronic sub-assembly with regard to Regulation N° 10

Numéro d'homologation par type:
Approval number:

E13*10R05/01*14987*00

Marque d'homologation:
Approval mark:



1. Fabricant: (marque commerciale du
constructeur):
Make (trade name of manufacturer):

Amber Valley Developments LLP

2. Type:
Type:

AVS805b

Dénomination(s) commerciale(s) générale(s):
General commercial description(s):

Talking Alarm

Version(s)/Variante(s):
Version(s)/Variant(s):

1357143, 20390, 21451, 257.1, 30044800, 30076267,
3007627, 351540, 44350031, 7927, 8500388, 8500928,
ANC009, ANC010, ANC054, ANC076C, ARK-RA-FWM,
AV209562, AVMA88, AVP05, AVR15C, ARK-LTA-4,
ARK-LTA-4GRUN, ARK-RTA-4, AVATT1, AVLT/BTS,
AVR14CLHARK, AVR15D, AVR15H, AVR15SB,
AVR7015CSPEC, AVR90BT, AVR91TKRECO, AVR95,
AVRWN02, AVRWN04, AVSALARM, AVSM14CLH,
AVSM14CRH, AVSM15CLH, AVSM15CRH, 400003764,
AVEM2014LIG103, CS1, CS2

TALKING ALARMS



AVR15CSPECIAL

Talking Alarm

Units can be pre-programmed to suit any application. The messages need to be supplied in a WAV file format. One-off £10 programming charge applicable.

AVR15C 12-24V



Talking Alarm (Factory set message "Stand Well Clear, Vehicle Reversing")

- Single Bolt Fixing
- CE and emc marked
- Epoxy sealed for greater durability
- against vibration and dust
- Pressure washable – IP67

Suitable for: Trucks, coaches, buses, fork trucks and plant.



AVR15C PETREG 12-24V COMMERCIAL



Talking Petrol Tanker (armoured cable) (Factory set msg)

This unit features night silent and override. This unit is fitted with a Mounting Boss and 1 metre of armour cable. It was originally produced for a major petroleum company but is now widely accepted throughout many parts of the world.

- CE and emc marked
- Pressure washable - IP67
- Dual voltage 12-24 volts
- Waterproof
- M.I.R.A. tested for on and off highway

Suitable for: Tankers.



AVR95 12-24V COMMERCIAL



Talking Alarm (Factory set message)

- Bracket Mounted (2 Bolt Fixing)
- Epoxy sealed for greater durability
- M.I.R.A. tested for all on and off
- road applications
- CE and emc marked
- Pressure washable - IP67

Suitable for: Trucks, coaches, buses and plant.



Also available as **AVR95SPECIAL** with bespoke message (as per AVR15CSPECIAL)

AVR95-3 12-24V COMMERCIAL



Talking Alarm Night Silent (Factory set message)

- Bracket mounted (2 bolt fixing)
- CE and emc marked
- Epoxy sealed for greater durability
- M.I.R.A. tested for on and off highway applications
- With 3rd orange lead (night silent) mutes the unit

Suitable for: Trucks, coaches, buses and plant.



AVR95R2 12-24V COMMERCIAL



Talking Alarm Reverse Twice (Factory set message)

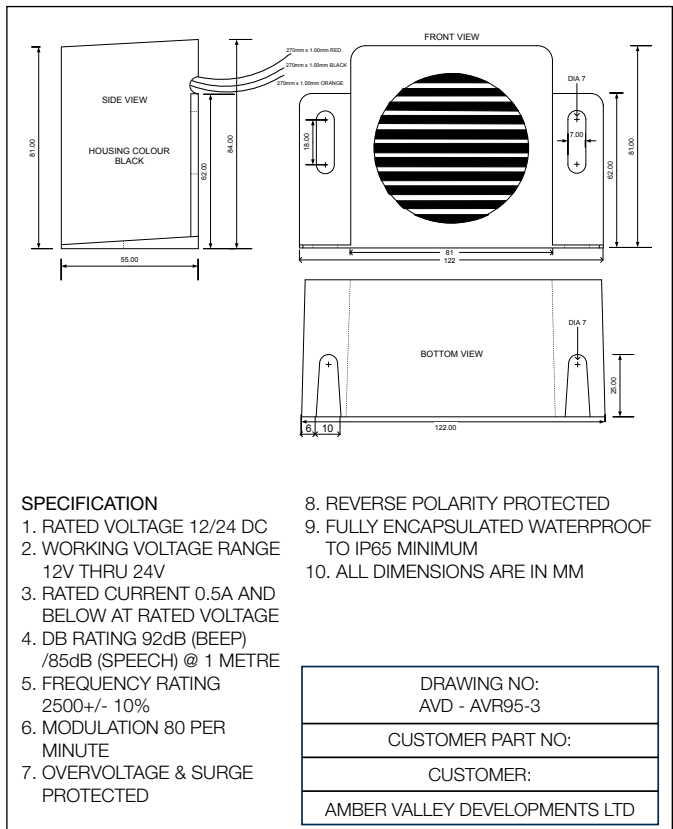
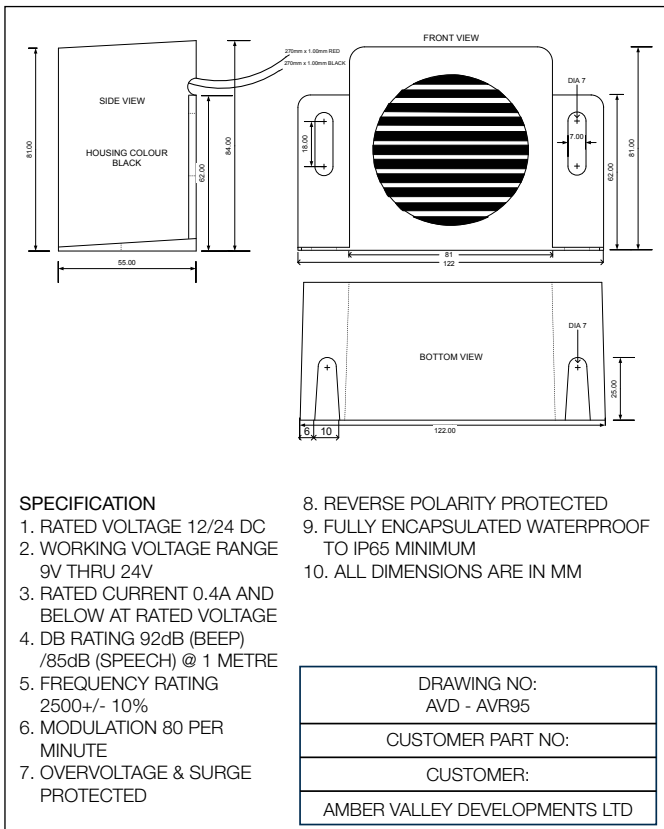
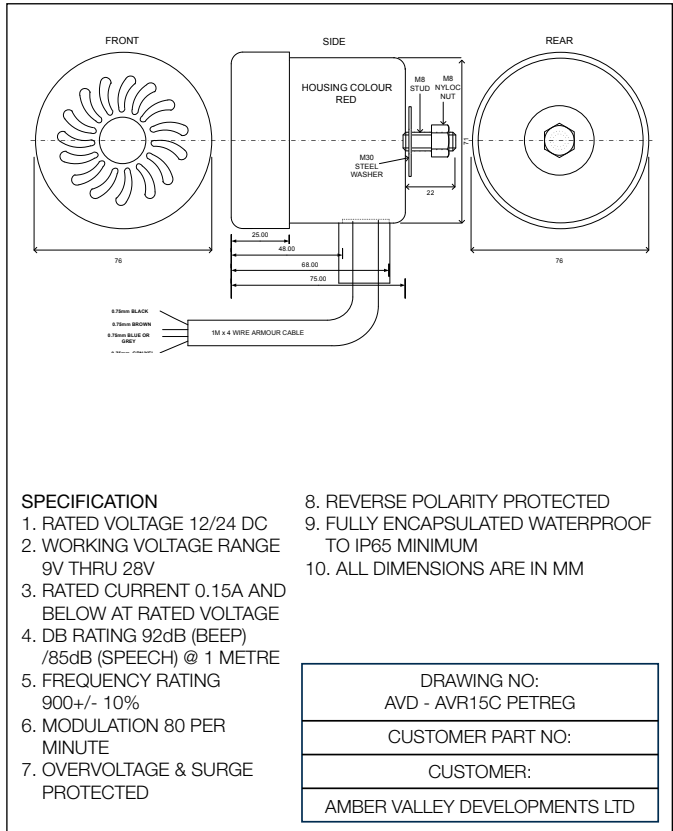
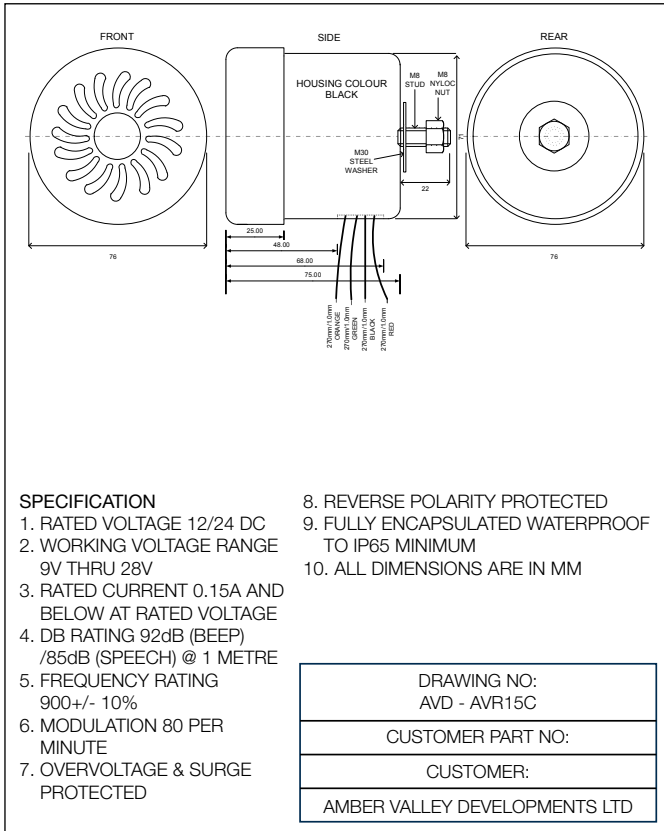
- Bracket mounted (2 bolt fixing)
- CE and emc marked
- Epoxy sealed for greater durability
- M.I.R.A. tested for on and off highway applications
- Can be muted by selecting reverse gear twice in quick succession

Suitable for: Trucks, coaches, buses and plant.





TALKING ALARMS



TALKING ALARMS

AVR15D 12-24V



“Diesel Fuel Only” Alarm

This unit is designed for vans and mini buses. When the fuel flap is opened – it gives the message “**DIESEL FUEL ONLY**”

- Single Bolt Fixing

- CE and emc marked
- Epoxy sealed for greater durability against vibration and dust
- Pressure washable - IP67

Suitable for: Light commercial vehicles.



AVR15H 12-24V



“Handbrake Not Applied” Alarm

This unit is designed to tell the driver that the handbrake is not applied as soon as he opens the driver’s door. Beep dB reduced to avoid startling the operator.

- Wired to door switch and muted by handbrake warning light

Suitable for: Trucks, coaches, buses.



AVR15C E/W 12-24V

English / Welsh

AVR15C E/I 12-24V

English / Irish

AVR15C W/E 12-24V

Welsh / English



Multi-Message Talking Alarm

These units are dual language same message alarms, they can be pre-programmed to suit any application. The messages need to be supplied in a WAV file format.

- Epoxy sealed for greater durability against vibration and dust

Suitable for: Trucks, coaches, buses, fork trucks and plant.



AVR95SA 12-24V COMMERCIAL



Talking Alarm Self Adjusting

- Bracket mounted (2 bolt fixing)
- CE and emc marked
- Epoxy sealed for greater durability against vibration and dust
- M.I.R.A. tested for on and off highway applications
- Self adjusting to reduce noise pollution (listens between messages & automatically adjusts to 5 dB above ambient sound)

Suitable for: Trucks, coaches, buses and plant.



AVR15SB 12-24V



Seatbelt Alarm “Please Fasten Seatbelt! Fasten Seatbelt!”

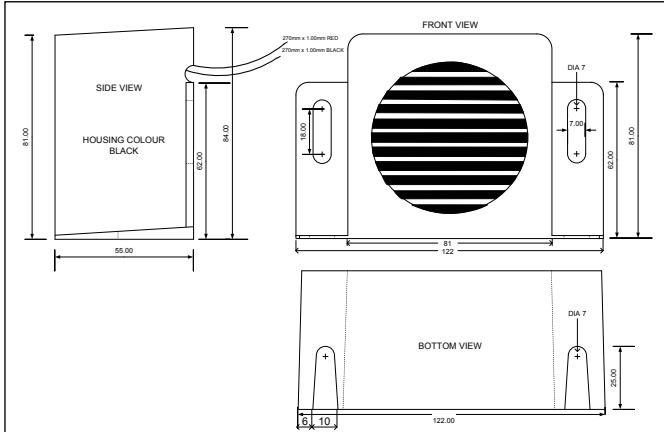
This unit is designed to inform passengers to fit their seatbelt. Ideally suited to school transport. The unit automatically gives the message twice when the door is closed. Used by many school bus companies.

Suitable for: Coaches and buses.





TALKING ALARMS



SPECIFICATION

1. RATED VOLTAGE 12/24 DC
2. WORKING VOLTAGE RANGE 12V THRU 24V
3. RATED CURRENT 0.4A AND BELOW AT RATED VOLTAGE
4. DB RATING 92dB (BEEP) /85dB (SPEECH) @ 1 METRE
5. FREQUENCY RATING 2500+/- 10%
6. MODULATION 80 PER MINUTE
7. OVERVOLTAGE & SURGE PROTECTED

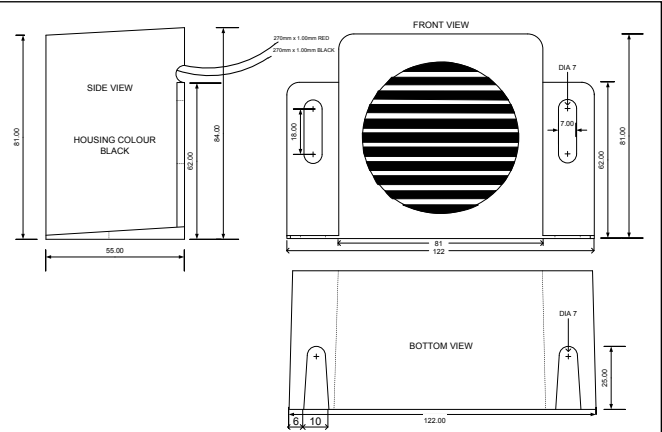
8. REVERSE POLARITY PROTECTED
9. FULLY ENCAPSULATED WATERPROOF TO IP65 MINIMUM
10. ALL DIMENSIONS ARE IN MM

DRAWING NO:
AVD - AVR95R2

CUSTOMER PART NO:

CUSTOMER:

AMBER VALLEY DEVELOPMENTS LTD



SPECIFICATION

1. RATED VOLTAGE 12/24 DC
2. WORKING VOLTAGE RANGE 12V THRU 24V
3. RATED CURRENT 0.4A AND BELOW AT RATED VOLTAGE
4. DB RATING 85-97dB (BEEP) /75-85dB (SPEECH) @ 1 METRE
5. FREQUENCY RATING 2500+/- 10% +SPEECH
6. MODULATION 80 PER MINUTE
7. OVERVOLTAGE & SURGE PROTECTED

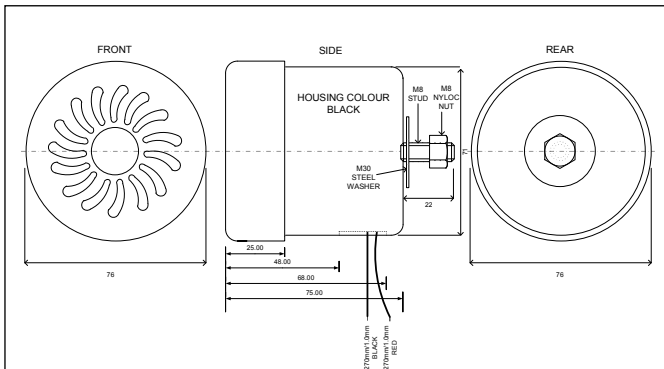
8. REVERSE POLARITY PROTECTED
9. FULLY ENCAPSULATED WATERPROOF TO IP65 MINIMUM
10. ALL DIMENSIONS ARE IN MM

DRAWING NO:
AVD - AVR95SA

CUSTOMER PART NO:

CUSTOMER:

AMBER VALLEY DEVELOPMENTS LTD



SPECIFICATION

1. RATED VOLTAGE 12/24 DC
2. WORKING VOLTAGE RANGE 9V THRU 28V
3. RATED CURRENT 0.15A AND BELOW AT RATED VOLTAGE
4. DB RATING 92dB (BEEP) /85dB (SPEECH) @ 1 METRE
5. FREQUENCY RATING 900+/- 10%
6. MODULATION 80 PER MINUTE
7. OVERVOLTAGE & SURGE PROTECTED

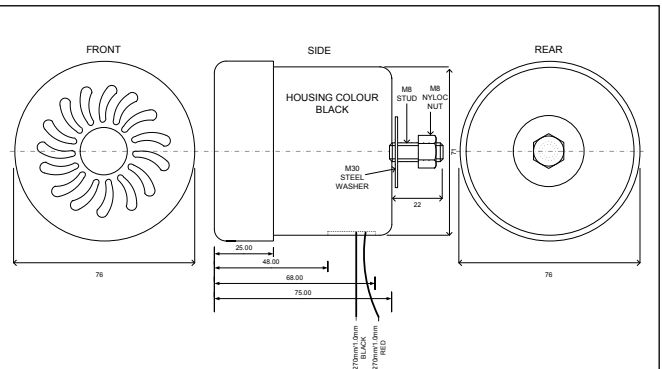
8. REVERSE POLARITY PROTECTED
9. FULLY ENCAPSULATED WATERPROOF TO IP65 MINIMUM
10. ALL DIMENSIONS ARE IN MM

DRAWING NO:
AVD - AVR15D

CUSTOMER PART NO:

CUSTOMER:

AMBER VALLEY DEVELOPMENTS LTD



SPECIFICATION

1. RATED VOLTAGE 12/24 DC
2. WORKING VOLTAGE RANGE 9V THRU 28V
3. RATED CURRENT 0.15A AND BELOW AT RATED VOLTAGE
4. DB RATING 85dB @ 1 METRE
5. FREQUENCY RATING 900+/- 10%
6. MODULATION 80 PER MINUTE
7. OVERVOLTAGE & SURGE PROTECTED

8. REVERSE POLARITY PROTECTED
9. FULLY ENCAPSULATED WATERPROOF TO IP65 MINIMUM
10. ALL DIMENSIONS ARE IN MM

DRAWING NO:
AVD - AVR15C

CUSTOMER PART NO:

CUSTOMER:

AMBER VALLEY DEVELOPMENTS LTD

THE SHRIEK OF THE SPHINX

ECOTALKING®

Environmentally Friendly Talking Alarm



AVR15CWN 12-24V 92dB

The ECOTALKING is kind to the environment being made partly of recycled material



Multi-frequency burst

“Stand well clear, vehicle reversing”

Ideal where the overall dB level of the Talking Alarm needs to be the same.

AVR95CWN 12-24V 92dB

The ECOTALKING is kind to the environment being made partly of recycled material



Multi-frequency burst

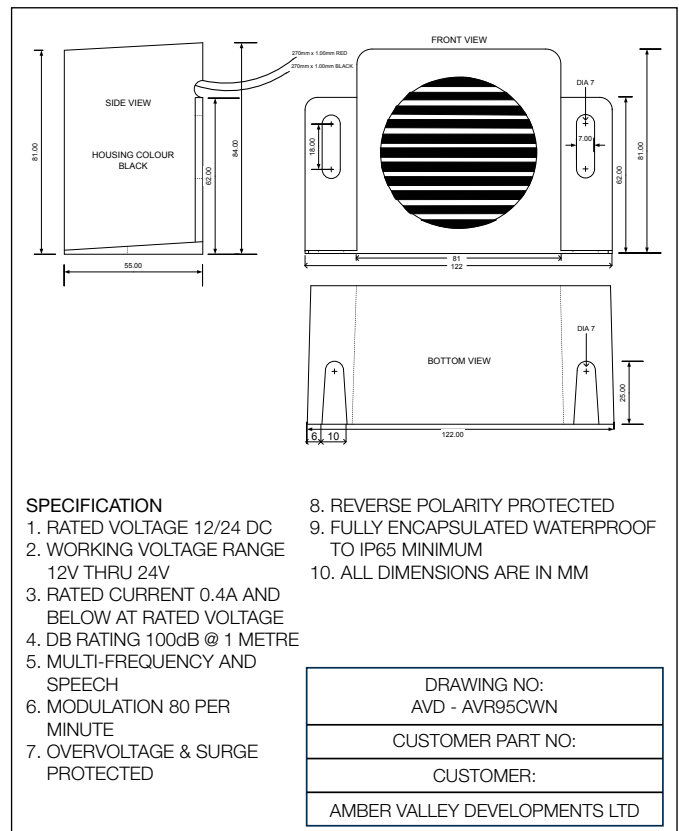
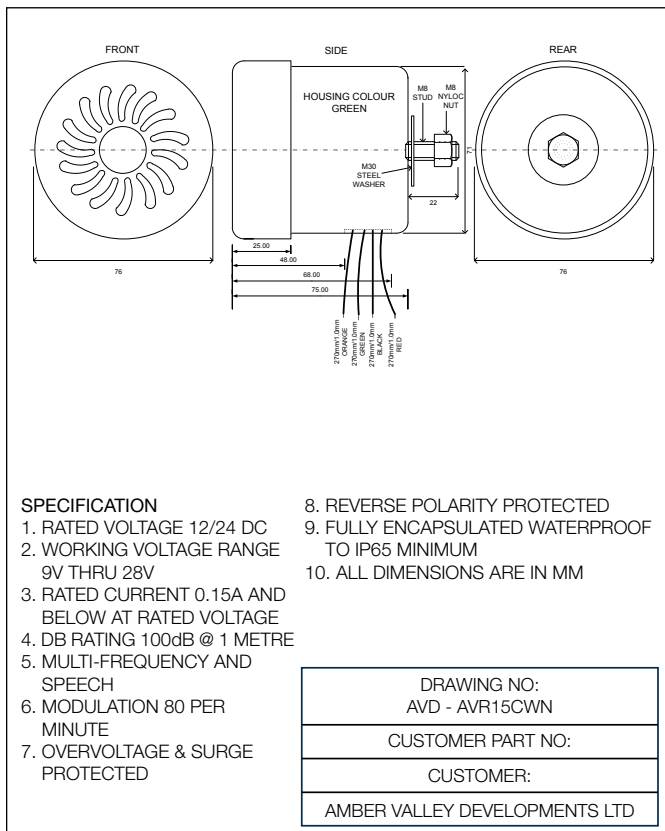
“Stand well clear, vehicle reversing”

Ideal where the overall dB level of the Talking Alarm needs to be the same.

Technical specifications

Product	Volts	dB level	Frequency	Current
AVR15CWN	12-24	92 dB	Speech	0.50 mA
AVR95CWN	12-24	92 dB	Speech	0.50 mA

Both Suitable for: Trucks, coaches, buses, rigid bodies, articulated trailers.



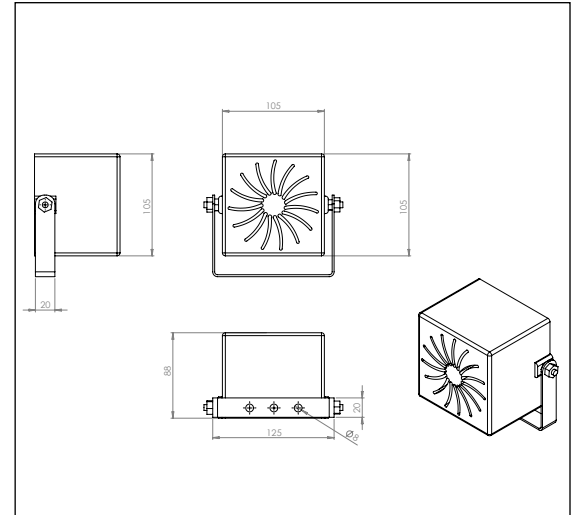


ATTACK ALARMS

NEW PRODUCT

We are delighted to announce the launch of our new ATTACK ALARMS.

These units are electronically exactly the same as the previous ATTACK ALARMS. However, we have tooled a brand new housing so that we can confidently say it is completely waterproof. Previous housing, although the front face was designed to be waterproof to IP67, water ingress was possible through the mounting studs for the bracket, especially when pressure washed, this tiny amount of water sometimes corroded the speaker. This is now impossible using our unit as the inside portion of the stud to hold the stainless steel bracket is embedded in the epoxy resin no water ingress is now possible. With the benefit of a panic button or a special trigger to activate the alarm and the fact that it cannot be turned off without knowing where the off switch is located it has a number of uses.



AVATT1B 12-24V HEAVY DUTY



Attack Alarm for Buses

Momentary on (panic Switch)
momentary off hidden switch to
turn alarm off.

**“Help, help, please call the
police, bus under attack!”**

Male or Female voice.

- Pressure washable
- Dual voltage
- Waterproof - IP67
- Tested and approved at M.I.R.A. for on and off highway
- CE and emc marked

AVATT1B technical specification

Volts	dB level	Frequency	Current	H x W x D	Fixing
12-24	110 dB	1200 Hz	0.45 A	110 x 114 x 118	Bracket

Suitable for: Coaches and buses.



AVATT1 12-24V HEAVY DUTY



Attack Alarm for Security Vehicles

Momentary on (panic Switch)
momentary off hidden switch to
turn alarm off.

**“Help, help, security vehicle
under attack, please call the
police!”**

Male or Female voice.

- Pressure washable
- Dual voltage
- Waterproof - IP67
- Tested and approved at M.I.R.A. for on and off highway
- CE and emc marked

AVATT1 technical specification

Volts	dB level	Frequency	Current	H x W x D	Fixing
12-24	110 dB	1200 Hz	0.45 A	110 x 114 x 118	Bracket

Suitable for: Security vehicles.



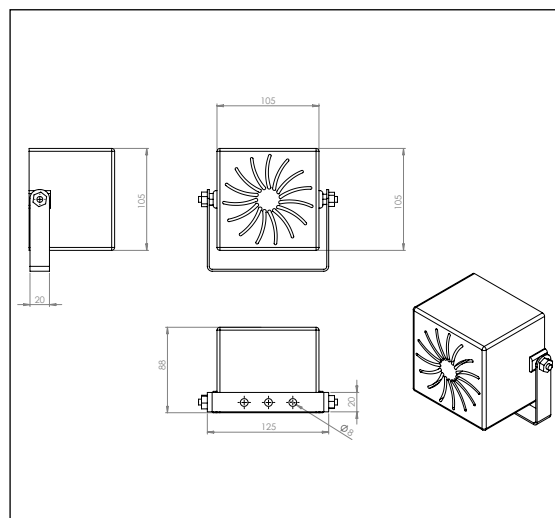
ATTACK ALARMS



The latest addition to this range is: **ANTI-SYPHONING DIESEL FUEL ALARM**

With the high cost of fuel and the high value of a tank of diesel this alarm is mounted on the back of the vehicle in proximity to the vehicle fuel tank but high up on the body work. It senses if the fuel level is changing or if the tank is being tampered with and activates the alarm with a high pitched siren and spoken message to call the police that the fuel is being stolen. The intensity of the sound and the fact that the unit cannot be turned off is sufficient to abort the attempted theft. The alarm only has to be triggered once to make it cost effective. The cable from the alarm is armoured cable making it more difficult to damage.

Our **ATTACK ALARMS** are also now used when a high powered (dB) spoken message is required, especially on large pieces of equipment as there is very little distortion of the spoken message.



AVATTSIREN 12-24V **HEAVY DUTY**



Siren only – no speech

Momentary on (panic Switch)
momentary off hidden switch to
turn alarm off.

- Pressure washable
- Dual voltage
- Waterproof - IP67

AVATTSIREN technical specification

Volts	dB level	Frequency	Current	H x W x D	Fixing
12-24	110 dB	1200 Hz	0.45 A	110 x 114 x 118	Bracket

Suitable for: Trucks, coaches, buses and security vehicles.



AVADS1 12-24V **HEAVY DUTY**



Anti Syphoning Diesel Fuel Alarm

Momentary on (panic Switch)
momentary off hidden switch to
turn alarm off.

- Pressure washable
- Dual voltage
- Waterproof - IP67

“Call police – diesel being stolen”

AVADS1 technical specification

Volts	dB level	Frequency	Current	H x W x D	Fixing
12-24	110 dB	1200 Hz	0.45 A	110 x 114 x 118	Bracket

Suitable for: Trucks, coaches and buses.





SITE MINDER TRACKED VEHICLE ALARM



Fitting Instructions (AVMA95):

1. Connect pressure switch to suitable service line or manifold.
2. Up to 4 pressure switches can be fitted to this alarm. The system comes with one pressure switch as standard.
3. Fit the alarm unit to a suitable mounting location and connect the power lead through the dash mounted mute switch.
4. Adjust the pressure sensor on the switch to suit the machine (20-50 bar). Apply oil tolerant thread locking / retaining compound on the end of the screw to prevent it vibrating loose (i.e. Loctite Threadlocking, Nutlock 243).
5. Connect the cable and firmly push the boot over the pressure switch (connections are not polarity conscious).
6. Connect the sensor cable to the alarm (does not matter which connection you use as they are all linked electronically).

OPERATED BY HYDRAULIC PRESSURE THEY CAN BE USED FOR MULTIPLE OPERATIONS

Now with the benefit of speech they can be used for any operation of the hydraulic system whether it is forward or rear movement.

Use off any hydraulic ram front shovel or rear back hoe.

Particularly useful when being operated in close proximity to ground workers.

Specifically designed for tracked vehicles with 360° rotating cabs, where it is impossible to know if the vehicle is going forwards or backwards, as there are no reverse lights or reverse gear on these vehicles. Extensive research into this problem with the co-operation of original equipment manufacturers, equipment dealers and repair specialists led us to develop the AVMA95 & AVMA98 Site Minder systems. The system can accept up to 4 individual inputs to cover all possibilities, spare sensors are available and a dash mounted mute switch for working in the hours of darkness.

- This system eliminates the need to run extra hydraulic hoses from the service lines to an alarm. It is more simple to run all the cables to the alarm.
- All sensors can be manually adjusted. When set to the required vehicle ambient pressure, it is advisable to put some oil tolerant thread locking/retaining compound on the end of the screw to prevent it vibrating loose (i.e. Loctite Threadlocking, Nutlock 243).
- Another advantage is that the sensors can be replaced quickly and easily. All sensors are individually available from stock.
- It does not matter which socket on the alarm is used as they are all linked electronically.
- All connections in to the alarm are fully waterproof Deutsch connections (IP67).

SITE MINDER TRACKED VEHICLE ALARM



AVMA96



Features & Benefits:

- Fits directly on to the hydraulic system via the service lines (eliminates the requirement for extra switches)
- Up to 4 sensors can be fitted
- Works when machine moves forwards or backwards
- Does not sound when machine tracks are stationary
- Adjustable pressure switch (20-50 BAR)
- Minimum 97dB output
- Solid state electronics completely encapsulated to withstand mud, water and vibration - IP67 rated
- CE and 'e' approved

AVMA96 system comprises:

- Alarm unit x1 (spares part number AVMA85)
- Adjustable sensor with 2m cable x1 (spares part number AVMA95SEN)
- Dash mounted Mute switch x1 (spares part number AVMASWITCH)

AVMA98

Talking version also available with
bespoke message

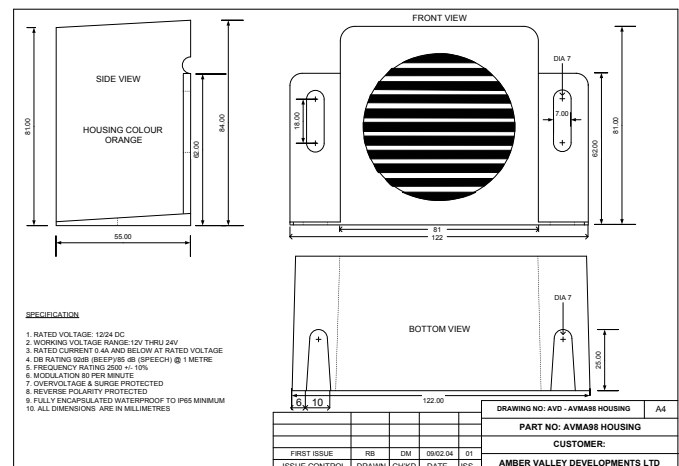
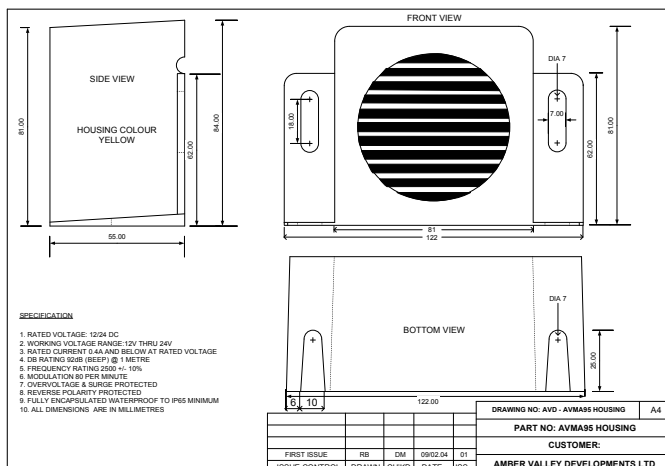


Features & Benefits:

- Fits directly on to the hydraulic system via the service lines (eliminates the requirement for extra switches)
- Up to 4 sensors can be fitted
- Works when machine moves forwards or backwards
- Does not sound when machine tracks are stationary
- Adjustable pressure switch (20-50 BAR)
- Minimum 97dB output
- Solid state electronics completely encapsulated to withstand mud, water and vibration - IP67 rated
- CE and 'e' approved

AVMA98 system comprises:

- Talking Alarm unit x1 (spares part number AVMA88)
- Adjustable sensor with 2m cable x1 (spares part number AVMA95SEN)
- Dash mounted Mute switch x1 (spares part number AVMASWITCH)





SITE MINDER TRACKED VEHICLE ALARM

AVMA85

Alarm Unit 2 metres of cable
4 Superseal connector inputs
for AVMA96



AVMA88

Alarm Unit 2 metres of cable
4 Superseal connector inputs for
AVMA98



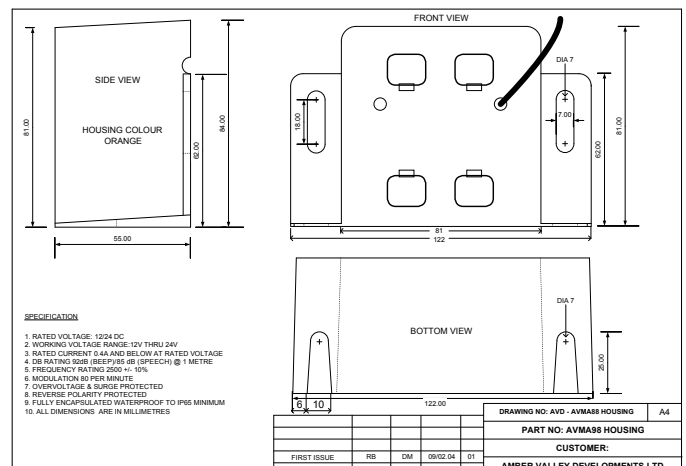
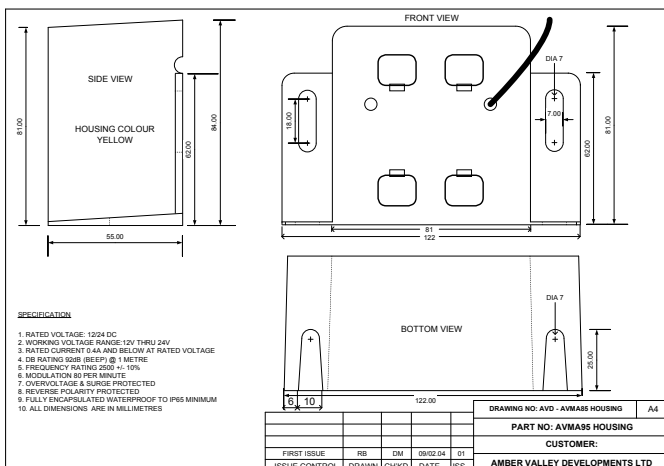
AVMA95SEN – ¼ BSP THREAD AVMA95SEN1 – ⅛ BSP THREAD

Adjustable pressure switch
c/w 2 metre cable Superseal connector



AVMASWITCH

Rocker Switch – On/Off illuminated
Rocker Switch c/w mounting housing



ELECTRIC VEHICLE ALARM SYSTEM



While powered but stationary the AVAS system emits a low level white noise/engine sound to simulate an idling engine. Volume and pitch increase with speed up to 20mph, when it cuts out as the road noise takes over. AVAS remains muted when either 'Park' or handbrake is applied.

When reverse gear is selected front speaker is muted and rear speaker emits a fixed db warning.

Range of alarms to suit all types of electric and hybrid vehicles from cars through to vans, trucks and buses.

Our acoustic vehicle alerting system (AVAS) will meet UNECE regulation 138 and will be possible to be re-programmed to meet changing requirements.



AVAS01WN 12-24V
LIGHT VEHICLE

AVAS02WN 12-24V
HEAVY VEHICLE

AVAS01EN 12-24V
LIGHT VEHICLE

AVAS02EN 12-24V
HEAVY VEHICLE

White Noise Versions

Single alarm with electronics built in ideally suited to smaller vehicles and urban delivery vans, warns VRU's that a quiet vehicle is approaching.

This system has an independent ECU completely waterproof 6 way superseal connector for all the inputs and a 4 way superseal connector with 2x2 way female connectors to connect the alarms. The second alarm being optional as most commercial vehicles already have reversing alarms fitted.

Simulated Engine Sound

Single alarm with electronics built in ideally suited to smaller vehicles and urban delivery vans, warns VRU's that a quiet vehicle is approaching.

Technical specifications

There are six input cables:

Red	+12v/24v
Black	Earth
Green	Speed Signal
White	Handbrake +VE
Yellow	Handbrake -VE
Brown	Reverse

All Suitable for: Light Commercial Vehicles.



Using our white noise or engine sound both of which are directional and easy to locate. The sound output increases with vehicle speed up to 20mph when it cuts out as the road noise takes over.



ELECTRIC VEHICLE ALARM SYSTEM

AVAS02RA 12-24V HEAVY VEHICLE

Beeping Reverse Alarm

Suitable for: Light Commercial Vehicles.



The ECU (AVASECU) comes with two sets of 3M cables making the system plug and play and easy to install input cables.

AVAS03PROG 12-24V HEAVY VEHICLE

Programmable

This part comes with a USB lead so that the message can be re-programmed by the customer should the need arise.



SECTION 2

AUDIBLE & VISUAL WARNING DEVICES



ALARMAFLASH.....	1
INDICATOR ALARMALIGHT	3
ALARMALIGHT.....	5
COUPLER CHANGE WARNING DEVICE.....	13
OVERLOADER ALARMALIGHT.....	15



INDICATOR ALARMALIGHT®

The Ultimate Alarm and Light Warning System

Saving Lives Every Day

BLIND SPOT PROTECTION



The increase in cycling, especially in our cities and towns and the problems of “blind spot” hazards with heavy vehicles turning, has resulted in the number of deaths increasing significantly. There have been many attempts at solutions, nearly all of which alert the driver, **NOT** the cyclist or pedestrian, which seems ludicrous as they are the ones in danger.

We have designed our Talking Alarm, which works off the indicator, to say exactly what the danger is to the cyclist or pedestrian.

However we have also discovered that on building sites, pedestrians wear ear defenders, cyclists on the road listen to music with earphones, which also reduces their concentration on their surroundings.

Indicator Alarmalight® Fitting Instructions

1. Red Lead to CONSTANT POWER
2. Black Lead to EARTH
3. Green Lead to OPERATING INDICATOR
4. White Lead to other side of FLASHER UNIT to mute
5. Orange to SWITCH ON DASHBOARD for half volume

Our Patent Pending Indicator Alarmalight® is designed to address all of these problems. Among its unique features are:

- Flashing high-powered LED lights to attract the attention of the cyclist, pedestrian or in fact deaf person or the hard of hearing
- The ability to go significantly quieter at night to compensate for the reduced traffic noise, to be environmentally friendly
- Universal fit for any vehicle
- Automatically switches off if hazard lights are in operation
- The light is brighter when in “quiet mode” to increase awareness
- Can have any message in any language programmed into it
- On trial by various government bodies in Europe
- Possible insurance reduction thereby making the system the most cost effective on the market
- Male or female voice
- Research has shown that nearly 80% of people respond to a female voice far more than to a male voice

We cannot stop accidents but we believe this device is the best on the market at saving lives.

ALARMAFLASH

The Ultimate Alarm and Light Warning System
Saving Lives Every Day Patent Number GB2499109



Alarmaflash Compact Alarmlight

AVAL1B Bleeping Alarmaflash®

AVAL1WN White Noise Alarmaflash®

AVAL15C Talking Alarmaflash®

- Stand Well Clear, Vehicle Reversing
- Dual voltage

AVAL1WNS/A White Noise Self-Adjusting Alarmaflash®

Wiring Instructions

Modes	Function	Red	Yellow	Brown	White	Green	Alarm	LEDs
Alarm Only	Vehicle Reversing	✓				✓	✓	✓
Night Silent	Side Lights On	✓	✓			✓		✓
Override	Fog Lights On	✓	✓	✓		✓	✓	✓
Alarm Only	No Light	✓			✓	✓	✓	
Light Only	No Alarm	✓		✓		✓		✓

Ideal Aid to vehicles reversing as it is Audible and Visual

The ultimate alarm and light warning system.

When the alarm is activated the lights flash in unison with the sound, when mute or half volume are selected the lights flash brighter to highlight the danger.

- Dual voltage
- CE and emc approved
- M.I.R.A. tested for all on and off highway applications
- Epoxy sealed for greater durability against water
- Complete with anti-vibration gasket and mounting screws
- E marked – e11*72/245*2009/19*7568*00
- 10R approved – 10R-037568





ALARMAFLASH

The Ultimate Alarm and Light Warning System

Saving Lives Every Day Patent Number GB2499109

Alarmaflash

AVAL1LH

Talking Left Turn Alarm and Light Combination

The LED lights are not synchronised with the message, but instead flash in a manner specifically designed to attract maximum attention.

- Dual voltage
- CE and emc approved
- M.I.R.A. tested for all on and off highway applications
- Epoxy sealed for greater durability against water
- Complete with anti-vibration gasket and mounting screws
- E marked – e11*72/245*2009/19*7568*00
- 10R approved – 10R-037568



INDICATOR ALARMALIGHT®

The Ultimate Alarm and Light Warning System

Saving Lives Every Day Patent Number GB2499109



AVAL2-14CLHO 12-24V

2 pod orange LED left turn indicator alarm

AVAL2-14CRHO 12-24V

2 pod orange LED right turn indicator alarm



Orange LED Indicator Alarmlight®

Probably the most Environmentally Friendly System on the market.

"Stand Clear, this vehicle is turning LEFT!"

"Stand Clear, this vehicle is turning RIGHT!"

The LED lights are not synchronised with the message, but instead flash in a manner specifically designed to attract maximum attention.

- Dual voltage
- CE and emc approved
- M.I.R.A. tested for all on and off highway applications
- Epoxy sealed for greater durability against water
- Complete with anti-vibration gasket and mounting screws
- E marked – e11*72/245*2009/19*7568*00
- 10R approved – 10R-037568

AVAL3-14CLHO 12-24V

1 pod orange LED left turn indicator alarm

AVAL3-14CRHO 12-24V

1 pod orange LED right turn indicator alarm



Wedge Indicator Alarmlight®

This is the latest version of our unique Indicator Alarmlight® where one of the lights is directed down the "blind side" of the vehicle to enhance the warning. Everything else remains the same and all the features remain the same.

"Stand Clear, this vehicle is turning LEFT!"

"Stand Clear, this vehicle is turning RIGHT!"

This unit has been developed at the request of some National Transport Departments in a variety of European countries.

- Dual voltage
- CE and emc approved
- M.I.R.A. tested for all on and off highway applications
- Epoxy sealed for greater durability against water
- Complete with anti-vibration gasket and mounting screws
- E marked – e11*72/245*2009/19*7568*00
- 10R approved – 10R-037568

SPECIFICATION

1. RATED VOLTAGE 12-24V
2. WORKING VOLTAGE RANGE 12V THROUGH 24V
3. RATED CURRENT 550 MA
4. MIN DB RATING 92dB (BEEP)/85 dB (SPEECH)
5. FREQUENCY 950 +/- 10%
6. MODULATION 70 PER MINUTE
7. OVERVOLTAGE AND SURGE PROTECTED
8. REVERSE POLARITY PROTECTED
9. FULLY ENCAPSULATED WATERPROOF TO IP67
10. ALL DIMENSIONS ARE IN MILLIMETRES
11. CASE MATERIAL ABS/ACRYLIC LENS
12. OPERATING TEMPERATURE -40° TO +50°
13. CABLE LENGTH 330MM

WIRING INSTRUCTIONS:

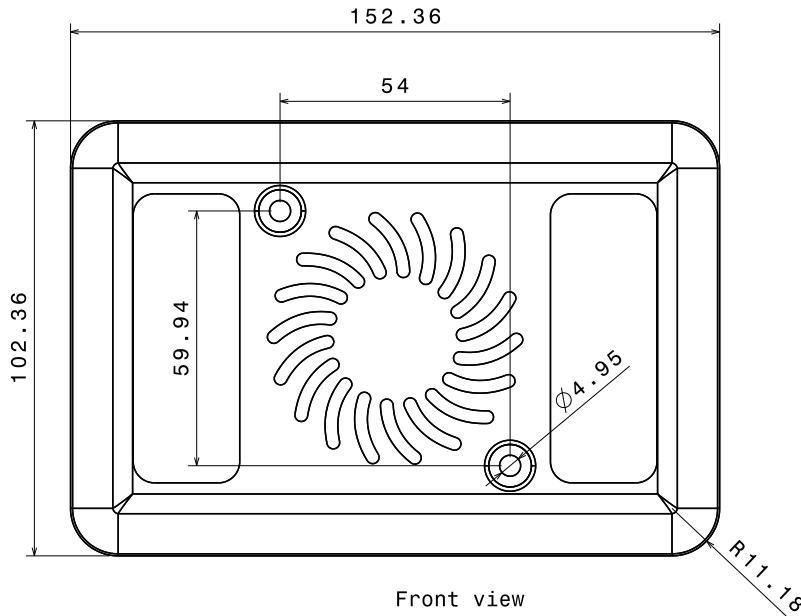
RED TO PERMANENT FEED
BLACK TO EARTH
GREEN TO CORRECT SIDE OF FLASHER UNIT (ACTIVATE)
ORANGE TO OPPOSITE SIDE OF FLASHER UNIT (MUTE)
WHITE TO DASH SWITCH (½ VOLUME)



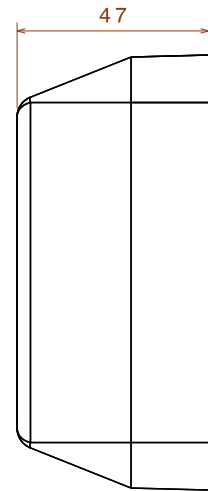
INDICATOR ALARMALIGHT®

The Ultimate Alarm and Light Warning System

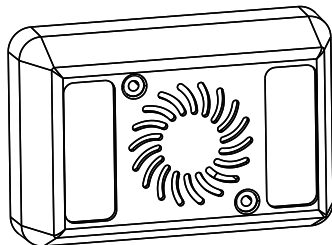
Saving Lives Every Day Patent Number GB2499109



Front view



Side view



Isometric view

WIRING INSTRUCTIONS:
RED TO PERMANENT FEED
BLACK TO EARTH
GREEN TO CORRECT SIDE OF FLASHER UNIT (ACTIVATE)
ORANGE TO OPPOSITE SIDE OF FLASHER UNIT (MUTE)
WHITE TO DASH SWITCH (½ VOLUME)

SPECIFICATION

1. RATED VOLTAGE 12-24V
2. WORKING VOLTAGE RANGE 12V THROUGH 24V
3. RATED CURRENT 550 MA
4. MIN DB RATING 92dB (BEEP)/85 dB (SPEECH)
5. FREQUENCY 950 +/- 10%
6. MODULATION 70 PER MINUTE
7. OVERVOLTAGE AND SURGE PROTECTED
8. REVERSE POLARITY PROTECTED
9. FULLY ENCAPSULATED WATERPROOF TO IP67
10. ALL DIMENSIONS ARE IN MILLIMETRES
11. CASE MATERIAL ABS/ACRYLIC LENS
12. OPERATING TEMPERATURE -40° TO +50°
13. CABLE LENGTH 330MM

DRAWING NO:
AVAL2-14CLHO
AVAL2-14CRHO

CUSTOMER PART NO:

CUSTOMER:

AMBER VALLEY DEVELOPMENTS LLP

ALARMALIGHT®

Patent Number GB2499109



“She was wearing earphones ...”

“... if only we had an Alarmalight fitted this would not have happened.”



The Alarmalight® range has been specifically designed to improve safety when reversing or in fact most other dangerous situations. The reversing version with white LEDs is available with constant on white LEDs, as flashing white lights on the rear of a vehicle is not allowed.

The amber LED version is available with the quad flash pattern or an alternating flash pattern, especially suitable for special needs vehicles.

The red LED version is designed for use in quarries and mines in India, where it is a legal requirement.

The blue LED version is designed for off highway use in quarries where blue lights are permitted, as amber lights are so prevalent they risk becoming invisible. It is available as a 2 pod or 4 pod.

The range is now complete with our 4 pod version and our Super H/D Construction Equipment version. Talking versions are also available and are on trial by many utility companies as they can be programmed with messages to suit the type of vehicle, and the lights will flash to increase the warning.

Examples are on Electricity Board vehicles when delivering poles the vehicle stops and the crane is activated to unload poles into fields. The message would be “Stand clear, crane in operation”. When a special vehicle (drain cleaner or vehicle with crane stops) it automatically says what is happening and the lights flash to give immediate warning. All 2 pod versions can be paired with our AVEL01 emergency light and can be automatically synchronised. All versions can be used in “lights only” mode, thereby removing the need to buy separate costly LED warning lights.

Alarmalight® Fitting Instructions

1. Red Lead to Reverse Light
2. Black Lead to Earth
3. Orange Lead to Side Light for Night Silent or Half Volume
4. Green Lead to Fog Light for Night Silent Override
5. White to switch on dashboard for lights only operation



Intellectual
Property
Office

Certificate of Grant of Patent

Patent Number: GB2499109
Proprietor(s): David Morewood
Inventor(s): David Morewood

This is to Certify that, in accordance with the Patents Act 1977,

a Patent has been granted to the proprietor(s) for an invention entitled
"Audible and visual warning device" disclosed in an application filed
23 January 2013.

Dated 6 June 2018

Tim Moss

Comptroller-General of Patents, Designs and Trade Marks
Intellectual Property Office

The attention of the Proprietor(s) is drawn to the important notes overleaf.

Intellectual Property Office is an operating name of the Patent Office

ALARMALIGHT®

Patent Number GB2499109



AVAL280W 12-24V

BEEPING 2 pod WHITE LED
Alarmalight®

AVAL215CW 12-24V

2 pod WHITE LED TALKING
Alarmalight®



Alarm and White Non-Flashing LED Light Combined

The ultimate alarm and light warning system.

“Stand Well Clear, Vehicle Reversing”

When the alarm is activated the lights come on continuously with the sound, when mute or half volume are selected the lights are brighter to highlight the danger. The lights are on constantly to assist (compliment) the vehicle reverse lights.

- Dual voltage
- CE and emc approved
- M.I.R.A. tested for all on and off highway applications
- Epoxy sealed for greater durability against water
- Complete with anti-vibration gasket and mounting screws
- E marked – e11*72/245*2009/19*7568*00
- 10R approved – 10R-037568

AVAL280O 12-24V

BEEPING 2 pod ORANGE LED
Alarmalight®

AVAL215CO 12-24V

2 pod ORANGE LED TALKING
Alarmalight®



Alarm and Orange LED Light Combined

The ultimate alarm and light warning system.

“Stand Clear, this vehicle is
turning LEFT!”

“Stand Clear, this vehicle is
turning RIGHT!”

When the alarm is activated the lights flash in unison with the sound, when mute or half volume are selected the lights flash brighter to highlight the danger.

- Dual voltage
- CE and emc approved
- M.I.R.A. tested for all on and off highway applications
- Epoxy sealed for greater durability against water
- Complete with anti-vibration gasket and mounting screws
- E marked – e11*72/245*2009/19*7568*00
- 10R approved – 10R-037568

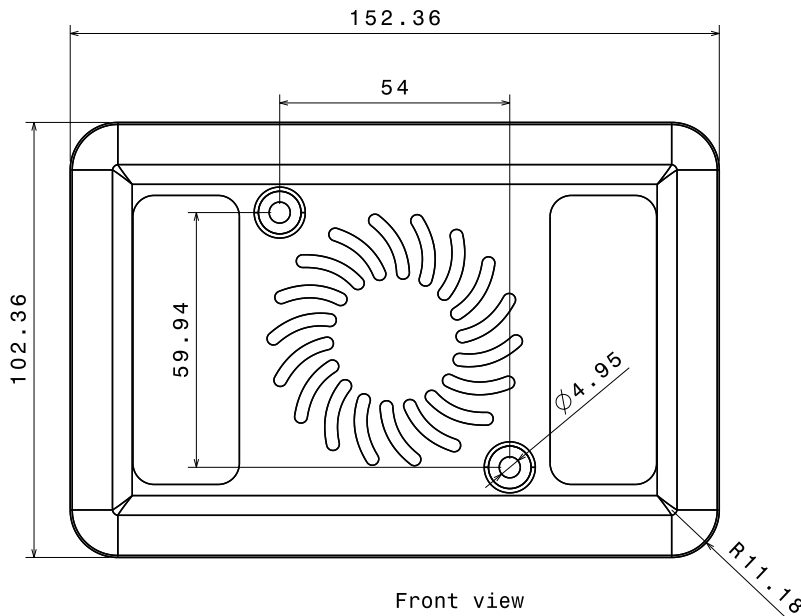
Fitting Instructions

1. Red Lead – Positive
2. Black Lead – Negative
3. Orange Lead for Half Volume
4. Green Lead for Night Silent Override
5. White for lights only operation

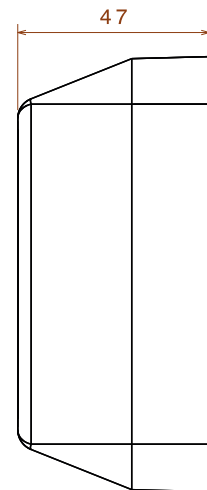


ALARMALIGHT®

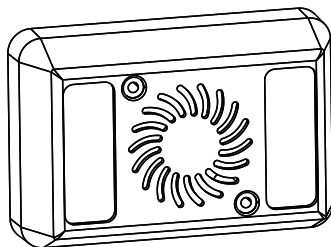
Patent Number GB2499109



Front view



Side view



Isometric view

WIRING INSTRUCTIONS
RED TO REVERSE LIGHT
BLACK TO EARTH
ORANGE TO SIDE LIGHT (MUTE)
GREEN TO FOG LIGHT (OVERRIDE)
WHITE TO DASH SWITCH (LIGHTS ONLY)
YELLOW TO SYNCHRONISE WITH OTHER DEVICES*

*Not all units synchronise – please ask your distributor for further details.

SPECIFICATION

1. RATED VOLTAGE 12-24V
2. WORKING VOLTAGE RANGE 12V THROUGH 24V
3. RATED CURRENT 550 MA
4. MIN DB RATING 92dB (BEEP)/85 dB (SPEECH)
5. FREQUENCY 950 +/- 10%
6. MODULATION 70 PER MINUTE
7. OVERVOLTAGE AND SURGE PROTECTED
8. REVERSE POLARITY PROTECTED
9. FULLY ENCAPSULATED WATERPROOF TO IP67
10. ALL DIMENSIONS ARE IN MILLIMETRES
11. CASE MATERIAL ABS/ACRYLIC LENS
12. OPERATING TEMPERATURE -40° TO +50°
13. CABLE LENGTH 330MM

DRAWING NO:
AVAL280W
AVAL215CW

CUSTOMER PART NO:

CUSTOMER:

AMBER VALLEY DEVELOPMENTS LLP

ALARMALIGHT®

Patent Number GB2499109



AVAL280OALT 12-24V

BEEPING 2 pod ORANGE
ALTERNATING FLASH LED
Alarmalight®

AVAL215COALT 12-24V

2 pod ORANGE LED ALTERNATING
FLASH TALKING
Alarmalight®



Alarm and Orange Alternating Flash LED Light Combined

The ultimate alarm and light warning system.

When the alarm is activated the lights flash alternatively, when mute or half volume are selected the lights flash brighter to highlight the danger.

This has been designed for special needs vehicles where quad flash may cause problems.

- Dual voltage
- CE and emc approved
- M.I.R.A. tested for all on and off highway applications
- Epoxy sealed for greater durability against water
- Complete with anti-vibration gasket and mounting screws
- E marked – e11*72/245*2009/19*7568*00
- 10R approved – 10R-037568

AVAL280R 12-24V

BEEPING 2 pod RED LED
Alarmalight®

AVAL215CR 12-24V

2 pod RED LED TALKING
Alarmalight®



Alarm and Red LED Light Combined

The ultimate alarm and light warning system.

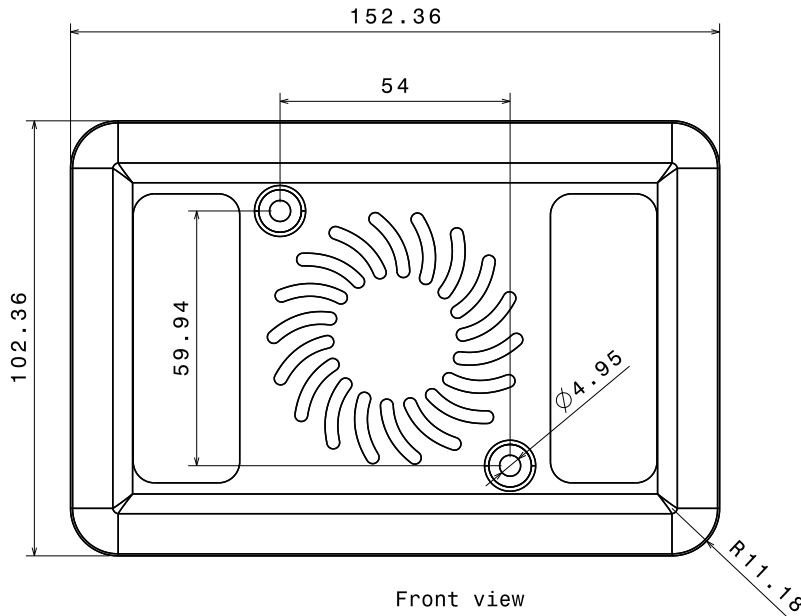
When the alarm is activated the lights flash in unison with the sound, when mute or half volume are selected the lights flash brighter to highlight the danger.

- Dual voltage
- CE and emc approved
- M.I.R.A. tested for all on and off highway applications
- Epoxy sealed for greater durability against water
- Complete with anti-vibration gasket and mounting screws
- E marked – e11*72/245*2009/19*7568*00
- 10R approved – 10R-037568

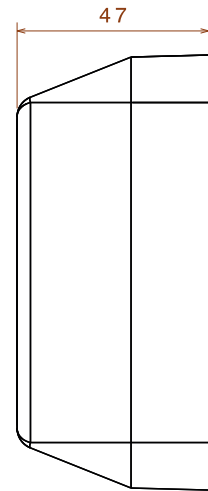


ALARMALIGHT®

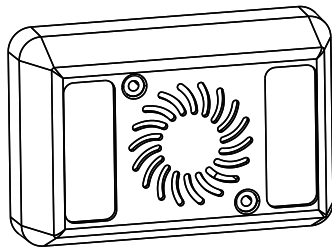
Patent Number GB2499109



Front view



Side view



Isometric view

WIRING INSTRUCTIONS
RED TO REVERSE LIGHT
BLACK TO EARTH
ORANGE TO SIDE LIGHT (MUTE)
GREEN TO FOG LIGHT (OVERRIDE)
WHITE TO DASH SWITCH (LIGHTS ONLY)

*Not all units synchronise – please ask your distributor for further details.

SPECIFICATION

1. RATED VOLTAGE 12-24V
2. WORKING VOLTAGE RANGE 12V THROUGH 24V
3. RATED CURRENT 550 MA
4. MIN DB RATING 92dB (BEEP)/85 dB (SPEECH)
5. FREQUENCY 950 +/- 10%
6. MODULATION 70 PER MINUTE
7. OVERVOLTAGE AND SURGE PROTECTED
8. REVERSE POLARITY PROTECTED
9. FULLY ENCAPSULATED WATERPROOF TO IP67
10. ALL DIMENSIONS ARE IN MILLIMETRES
11. CASE MATERIAL ABS/ACRYLIC LENS
12. OPERATING TEMPERATURE -40° TO +50°
13. CABLE LENGTH 330MM

DRAWING NO:
AVAL280OALT
AVAL215COALT

CUSTOMER PART NO:

CUSTOMER:

AMBER VALLEY DEVELOPMENTS LLP

ALARMALIGHT®

Patent Number GB2499109



AVAL480W 12-24V

BEEPING 4 pod WHITE LED
Alarmalight®

AVAL415CW 12-24V

4 pod WHITE LED TALKING
Alarmalight®



Alarm and White Non-Flashing LED Light Combined

The ultimate alarm and light warning system.

When the alarm is activated the lights come on continuously with the sound, when mute or half volume are selected the lights are brighter to highlight the danger.

- Dual voltage
- CE and emc approved
- M.I.R.A. tested for all on and off highway applications
- Epoxy sealed for greater durability against water
- Complete with anti-vibration gasket and mounting bolts
- E marked – e11*72/245*2009/19*7568*00
- 10R approved – 10R-037568

AVAL480O 12-24V

BEEPING 4 pod ORANGE LED
Alarmalight®

AVAL415CO 12-24V

4 pod ORANGE LED TALKING
Alarmalight®



Alarm and Orange LED Light Combined

The ultimate alarm and light warning system.

When the alarm is activated the lights flash in unison with the sound, when mute or half volume are selected the lights flash brighter to highlight the danger.

- Dual voltage
- CE and emc approved
- M.I.R.A. tested for all on and off highway applications
- Epoxy sealed for greater durability against water
- Complete with anti-vibration gasket and mounting bolts
- E marked – e11*72/245*2009/19*7568*00
- 10R approved – 10R-037568

AVAL480B 12-24V

BEEPING 4 pod BLUE LED
Alarmalight®

AVAL415CB 12-24V

4 pod BLUE LED TALKING
Alarmalight®



Alarm and Blue LED Light Combined FOR OFF HIGHWAY USE ONLY

The ultimate alarm and light warning system.

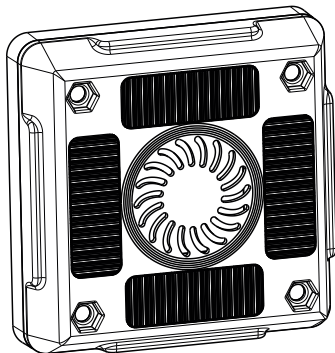
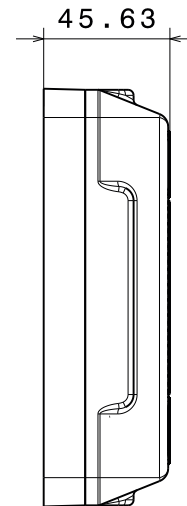
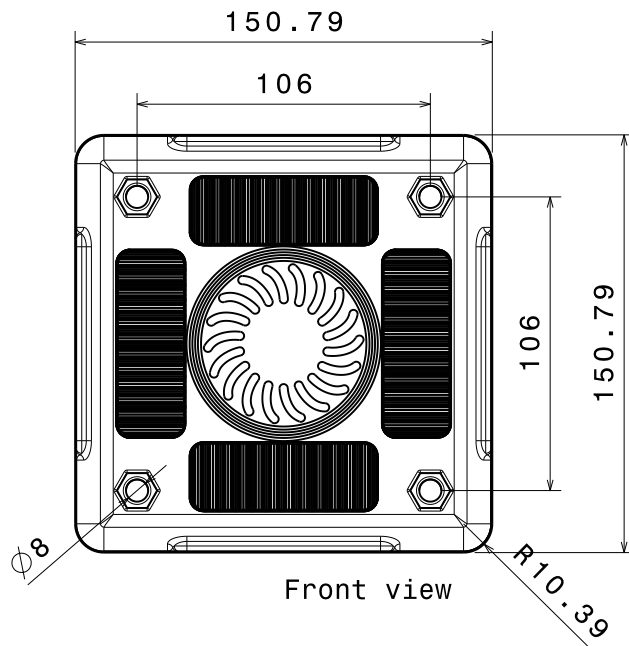
When the alarm is activated the lights flash in unison with the sound, when mute or half volume are selected the lights flash brighter to highlight the danger.

- Dual voltage
- CE and emc approved
- M.I.R.A. tested for all on and off highway applications
- Epoxy sealed for greater durability against water
- Complete with anti-vibration gasket and mounting bolts
- E marked – e11*72/245*2009/19*7568*00
- 10R approved – 10R-037568



ALARMALIGHT®

Patent Number GB2499109



WIRING INSTRUCTIONS
 RED TO REVERSE LIGHT
 BLACK TO EARTH
 ORANGE TO SIDE LIGHT (MUTE)
 GREEN TO FOG LIGHT (OVERRIDE)
 WHITE TO DASH SWITCH (LIGHTS ONLY)

*Not all units synchronise – please ask your distributor for further details.

SPECIFICATION

1. RATED VOLTAGE 12-24V
2. WORKING VOLTAGE RANGE 12V THROUGH 24V
3. RATED CURRENT 850 MA
4. MIN DB RATING 92dB (BEEP)/85 dB (SPEECH)
5. FREQUENCY 950 +/- 10%
6. MODULATION 70 PER MINUTE
7. OVERVOLTAGE AND SURGE PROTECTED
8. REVERSE POLARITY PROTECTED
9. FULLY ENCAPSULATED WATERPROOF TO IP67
10. ALL DIMENSIONS ARE IN MILLIMETRES
11. CASE MATERIAL ABS/ACRYLIC LENS
12. OPERATING TEMPERATURE -40° TO +50°
13. CABLE LENGTH 330MM

DRAWING NO:
 AVAL480W
 AVAL415CW

CUSTOMER PART NO:

CUSTOMER:

AMBER VALLEY DEVELOPMENTS LLP

COUPLER CHANGE WARNING DEVICE



**Patent Number
GB2499109**

STAND CLEAR COUPLER ATTACHMENT CHANGE IN PROGRESS

AVAL215CWBW 12-24V

**White-blue-white LEDs for maximum light
output and awareness.**

- Dual voltage
- CE and emc approved
- M.I.R.A. tested for all on and off highway applications
- Epoxy sealed for greater durability against water
- Complete with anti-vibration gasket
- E marked – e11*72/245*2009/19*7568*00
- 10R approved – 10R-037568
- Deutsch DT connector
- 8m cable with f/male Deutsch connector

“MAKING THE WORKPLACE SAFER”



LE GOUVERNEMENT
DU GRAND-DUCHÉ DE LUXEMBOURG
Ministère de la Région
et des Travaux publics

Département de la mobilité
et des transports

SOCIÉTÉ NATIONALE DE
CERTIFICATION ET D'HOMOLOGATION
s.n.l.

Registre de Commerce: B 27180

L-5201 Sandweiler



Référence: E13*10R05/01*15255*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 09 septembre 2019

Communication concernant:⁽²⁾
Communication concerning:




- la délivrance d'une homologation
approval granted
- l'extension d'homologation
approval extended
- le refus d'homologation
approval refused
- le retrait d'homologation
approval withdrawn
- l'arrêt définitif de la production
production definitely discontinued

d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of electrical/electronic sub-assembly with regard to Regulation N° 10

Numéro d'homologation par type:
Approval number:

E13*10R05/01*15255*00

Marque d'homologation:
Approval mark:

 10R - 05 15255

1. Fabricant: (marque commerciale du constructeur):
Make (trade name of manufacturer):

Amber Valley Developments LLP

2. Type:
Type:

Alarmlight Talker (ALTALK IG)

Dénomination(s) commerciale(s) générale(s):
General commercial description(s):

Alarmlight Talker (ALTALK IG)

Version(s)/Variante(s):
Version(s)/Variant(s):

21457, 21458, 45021000, ANC011, ARKAL,
ARKAL-LTA4WSS, ARK-AL-LTABRETTS,
ARK-AL-LTACOOOP, ARK-AL-LTAGREGGS,
ARK-AL-RABRETTS, ARK-RA-BRETTS-WL,
AVAL15CWBW, AVAL2-14BRETTS,
AVAL214BSCLO, AVAL2-14CLHEMLEF,
AVAL2-14CLHO, AVAL2-14CLHODB,
AVAL2-14CLHONS, AVAL2-14CLHW,
AVAL2-14CRHEMRIG, AVAL2-14CRHO,
AVAL2-14CRHW, AVAL2-14VT,
AVAL2-14VTVEOLIA, AVAL2153WCO,
AVAL215CO, AVAL215COALT,
AVAL215CO-BRETTS, AVAL215COEMREV,
AVAL215COLT, AVAL215COLTSS,

OVERLOADER ALARMALIGHT®



AVALTL01 12-24V

Crane Overload Warning System



Complete with audible warning device which activates in conjunction with the red LEDs.

The unit takes its inputs from the load weighing system fitted to the vehicle. When the vehicle is operating below capacity a **GREEN** LED light is in operation, when the capacity is higher (dependant on vehicle specification) the **GREEN** LED light goes off and the **AMBER** LED light comes on. If the vehicle is operating in overload mode the **AMBER** LED light goes off and the **RED** LED light and ALARM alerts people in the surrounding area that the vehicle is operating in a dangerous fashion. The LED lights and ALARM can be pulsed if required – this function is normally controlled by the vehicle manufacturer.

When the **AMBER** light is on, the audible alarm sounds intermittently. When the **RED** light is on, it is continuous.

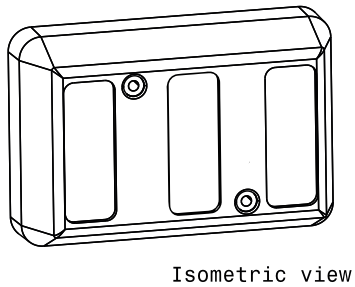
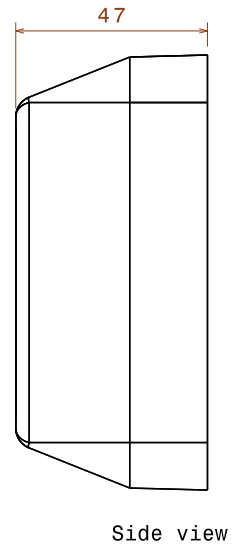
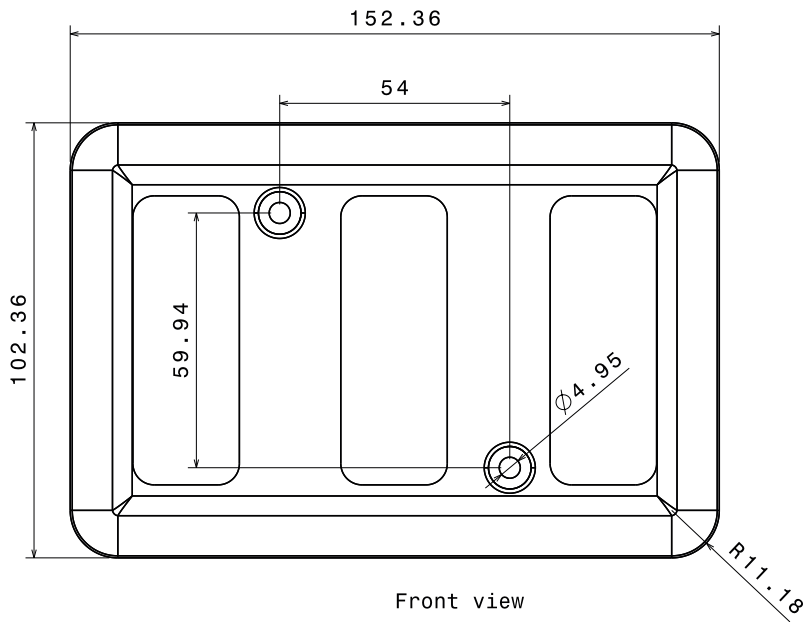
- Dual voltage
- High powered LED lights
- E marked – e11*72/245*2009/19*7568*00
- 10R approval – 10R-037568
- Completely encapsulated to withstand vibration and shock
- Continuous tone or intermittent
- Complete with mounting screws
- Speaking versions available
- Separate in-cab warning light and buzzer available to warn the driver
- IP67 rated

Suitable for:

Vehicles where overloading warnings are required – cranes, telehandlers, Hiabs.



OVERLOADER ALARMALIGHT®



SPECIFICATION

1. RATED VOLTAGE 12-24V
2. WORKING VOLTAGE RANGE 12V THROUGH 24V
3. RATED CURRENT 550 MA
4. MIN DB RATING 92dB
5. FREQUENCY 950 +/- 10%
6. MODULATION 70 PER MINUTE WITH AMBER LIGHT, CONTINUOUS WITH RED LIGHT
7. OVERVOLTAGE AND SURGE PROTECTED
8. REVERSE POLARITY PROTECTED
9. FULLY ENCAPSULATED WATERPROOF TO IP67
10. ALL DIMENSIONS ARE IN MILLIMETRES
11. CASE MATERIAL ABS/ACRYLIC LENS
12. OPERATING TEMPERATURE -40° TO +50°
13. CABLE LENGTH 330MM

DRAWING NO:
AVALTL01

CUSTOMER PART NO:

CUSTOMER:

AMBER VALLEY DEVELOPMENTS LLP

SECTION 3

ADD-ON MODULES



ADD-ON MODULES	1
TIMER SWITCHES	5
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ROCKER SWITCHES	15
ROTARY SWITCHES	16
DOOR/ALARM SWITCHES.....	17



SECTION 3

ADD-ON MODULES

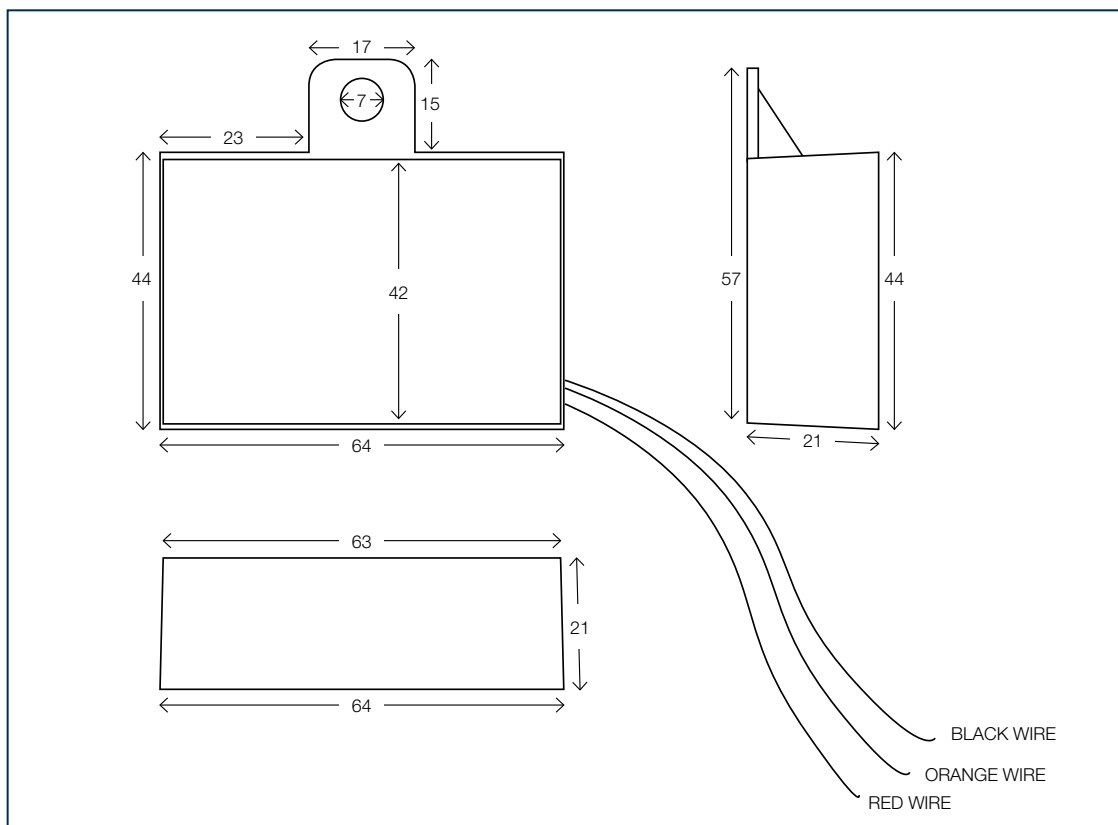
Amber Valley are justifiably proud of the range of ADD-ON MODULES that can be used with a wide range of products.

They are not only suitable for use with our product ranges but also with other manufacturer's products.

The majority of the ADD-ON MODULES are now incorporated into the part they were originally designed to improve.

However they are still very popular for a variety of uses as they can be used to upgrade existing products on vehicles.

Whatever your requirements if you do not find it in this section, please feel free to email us with details of what you would like and we will be happy to discuss developing an ADD-ON MODULE to suit your exact requirements.



ADD-ON MODULES



AVRRS6 12-24V



Timer Cut-out

- Six minute timer cut-out
- Auto reset
- 12-24V
- IP67 rated - sealed against mud, water and vibration
- 30(H) x 88(W) x 47(D)
- Can be used with any alarm

AVRR2ECU 12-24V



Select Reverse Twice ECU

- Reverse alarm cut-out switch – select reverse twice to disengage the alarm
- Auto reset
- 12-24V
- IP67 rated – sealed against mud, water and vibration
- 30(H) x 88(W) x 47(D)
- Can be used with any alarm

AVRRS7 12-24V



Timer Cut-out Reverse Twice

- In-line timer – allows reverse alarm to sound for first ten seconds of reversing manoeuvre
- Auto reset
- 12-24V
- IP67 rated – sealed against mud, water and vibration
- 30(H) x 88(W) x 47(D)
- Can be used with any alarm

AVSMMOD1 12-24V



Indicator Control Unit

Allows the use of Parking Sensor systems, Camera Systems and other appliances via the indicator circuit.

- Dual voltage
- Potted to withstand vibration
- Solid state electronics
- Fully waterproof
- Universal – fits all known applications
- Compact – easily fits under dashboard
- Not required with our Indicator Alarm System as it is already built in

EPS1 12-24V



PDS Interface Module

Will power up to 3 talking alarms from buzzer output on PDS kit when sensors detect an obstacle.

- Dual voltage
- Potted to withstand vibration
- Solid state electronics
- Fully waterproof
- Universal – fits all known applications
- Compact – easily fits under dashboard



ADD-ON MODULES

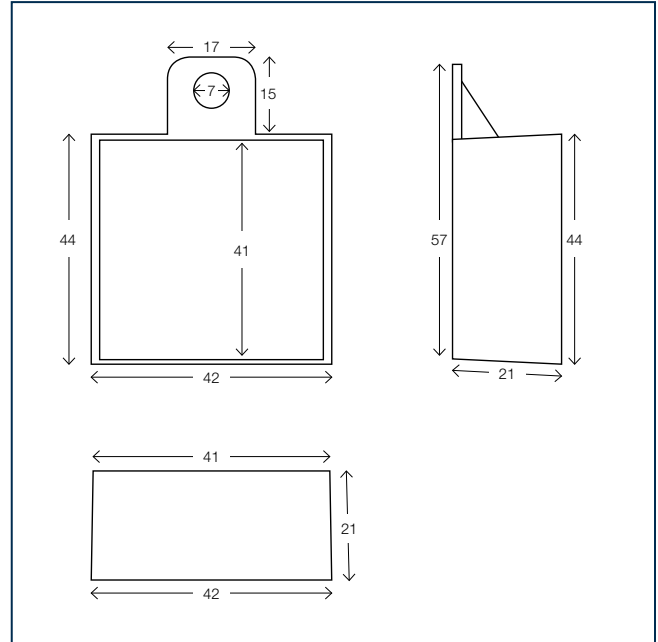
Wiring Instructions for AVSMMOD1

To work with left turn signal

RED – vehicle positive
BLACK – vehicle negative
BLUE – left indicator
WHITE – right indicator
YELLOW – output

*Fit blue to right indicator and white to left indicator if equipment is to be used when right turn signal on.

AVSMMOD1 provides a constant output when the vehicle turn indicator is on. This allows for the fitment of equipment (sensors, cameras, alarms) that are required to work when the vehicle is turning. AVSMMOD1 senses when the hazards are on and overrides the output.



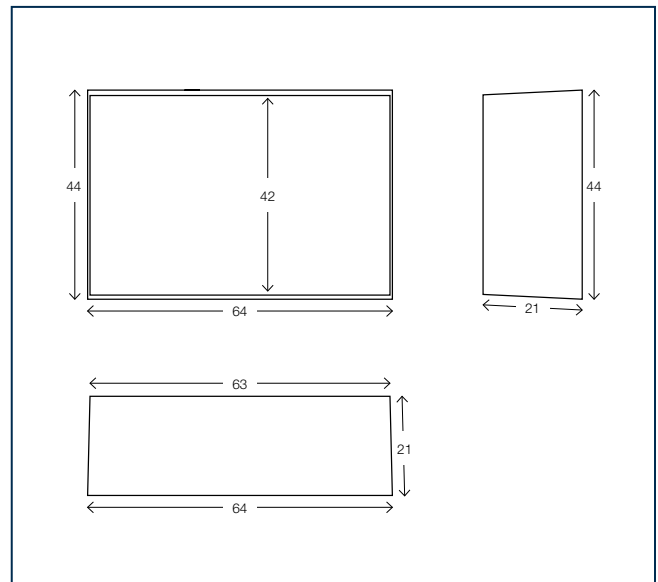
Wiring Instructions for EPS1

RED – vehicle positive
BLACK – vehicle earth
BLUE – connect to either buzzer wire from sensor kit ecu
GREEN/YELLOW/WHITE – connect to black wire on talking alarm

EPS1 gives you the benefit of being able to fit up to 3 extra alarms to work with any parking or side sensor system.

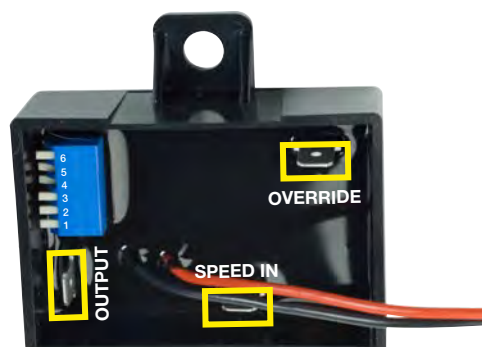
Should a hazard be detected a clear instruction will sound.

Example's "caution you are too close to this vehicle" and "driver check your mirrors".



SPEED SENSING MODULE

AVSPLIM01 12-24V
AVSPLIM02 12-24V



The AVSPLIM01 Speed Sensing Module is designed to turn **OFF** certain pieces of electronic equipment, whereas the AVSPLIM02 Speed Sensing Module is designed to turn **ON** certain pieces of electronic equipment above given speeds to eliminate confusion to the vehicle operator and nuisance to the general public.

- Dual voltage 12-24V
- Waterproof and dustproof
- Multi-setting speeds available
- Compatible with most quality manufactured products

Ideally suited to front or side sensor systems, the unit will disengage sensor systems when the vehicle is travelling over a certain speed. It has been specifically designed for use with our range of Indicator Alarms and Indicator Alarmalights®. The unit is completely versatile and can be used for any electronic device where working at or below certain speeds is an issue. The unit is completely encapsulated so it can be fitted inside the cab or outside and has a handy mounting bracket for ease of fitting.

Mph	Switch no.	Mph	Switch no.	Mph	Switch no.
6	5-6	17	1-3-4	35	1-2-3-4-5
7	4	18	2-3-4	38	1-2-6
8.5	4-6	20	1-5	40	1-3-6
10	4-5	23	1-2-5	42	4-6
11	4-5-6	25	1-3-5	45	1-2-4-6
12	1-4	28	1-4-5	50	1-5-6
13	2-4	30	2-4-5	60	1-2-4-5-6
15	1-2-4	33	1-3-4-5		

Note: all road speeds assume 4 pulse per metre.

Fitting of Speed Limiter

The device is designed to turn OFF (AVSPLIM01) / ON (AVSPLIM02) our indicator Alarmalight® at a pre-determined speed, which is set by selecting various options on the dil switch as set out in the fitting instructions. The unit needs to be powered directly from the vehicle; **RED** is positive and **BLACK** is ground. There are 3 tab terminals in the unit, marked on the fitting instructions:

- Speed in – on the bottom right this needs to be connected to plug B, Pin 8 on the back of the Tachograph and it will give the input signal to operate the unit.
- Output – this would be connected to the green lead from the Indicator Alarmalight to Activate it at the required speed.
- Override – this is generally NOT used for the Indicator Alarmalight as it is used more commonly for front sensors it can be connected to either a switch on the dashboard or the handbrake as it means the vehicle is not moving therefore the Indicator Alarmalight or Front Sensors do not need to be active, as it would cause confusion.

This unit will not affect the can bus system on vehicles.



SPEED SENSING MODULE

NEW

AVSPLIM03
AVSPLIM04

G.P.S. Speed Sensing Module



The AVSPLIM03 Speed Sensing Module is designed to turn **OFF** at a certain speed, whereas the AVSPLIM04 Speed Sensing Module is designed to turn **ON** at a certain speed and can have an audible warning.

- Suitable for 12V and 24V vehicles
- Uses an external ariel for greater accuracy
- Receives only signal does not transmit to eliminate the possibility of causing interference
- Does not rely on input making it a universal fit

TIMER SWITCHES & MODULES



Stainless Steel Timer Switch

AVBTS01 12-24V

AVBTS02 12-24V



Amber Valley are delighted to announce the launch of their new range of dual voltage multi setting stainless steel timer switches.

Specifically designed for the food delivery fleets, these timer switches have been hailed as a great improvement by many refrigerated body builders.

Wiring Instructions

P1 = 12/24V IN (+)

P2 = 12/24V OUT (+)

P3 = Earth

P4 = Additional Switch (Optional)

LED should be illuminated when lights are off to show where the switch is in the dark.

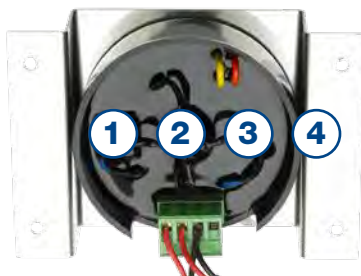
The timer circuit can be overridden by pressing the LED switch to avoid wasting power.

No cut wires – time 10 seconds (ideal for testing unit)

Red wire cut – time 10 minutes

Yellow wire cut – time 20 minutes

Both wires cut – time 45 minutes

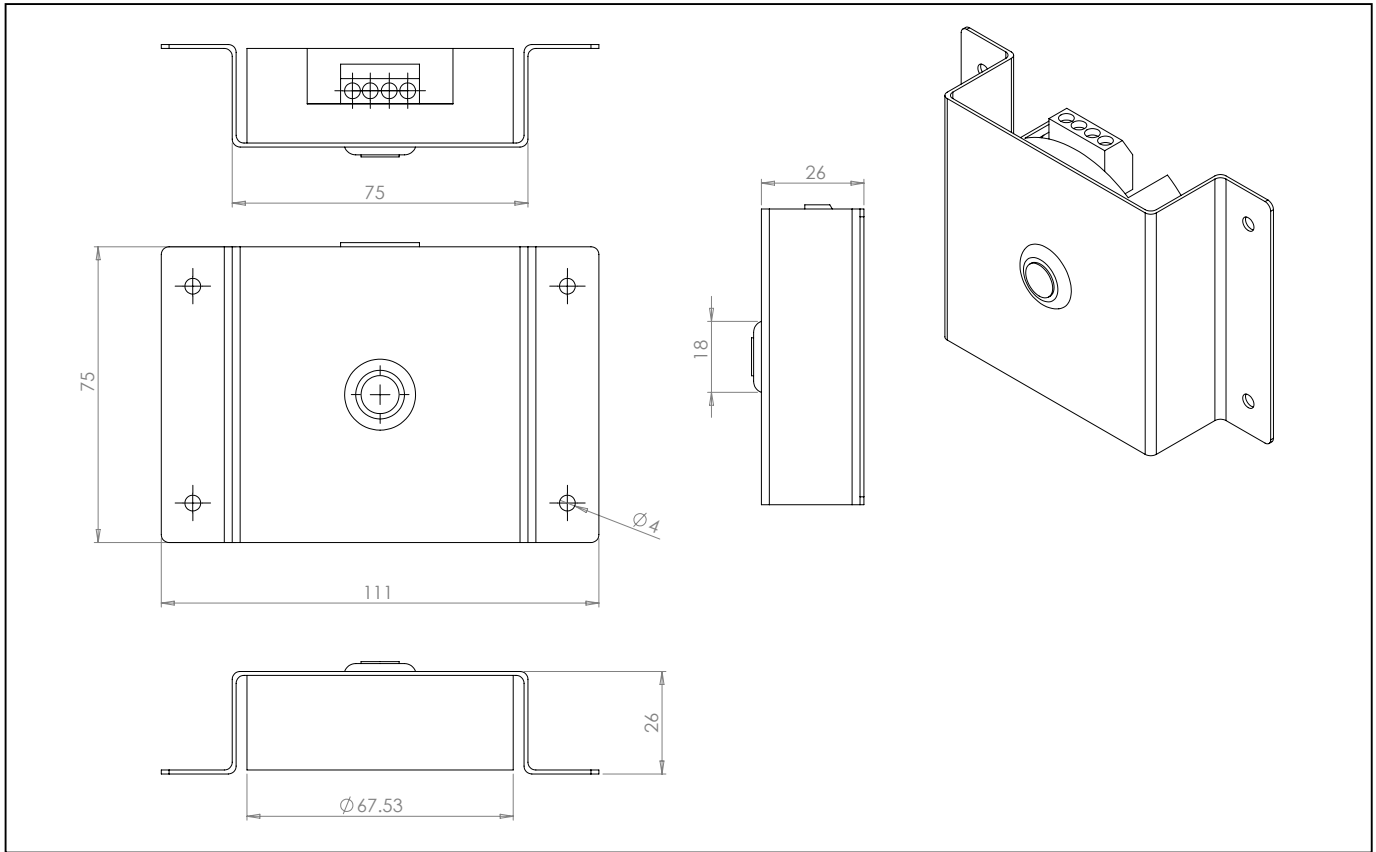


AVBTS03

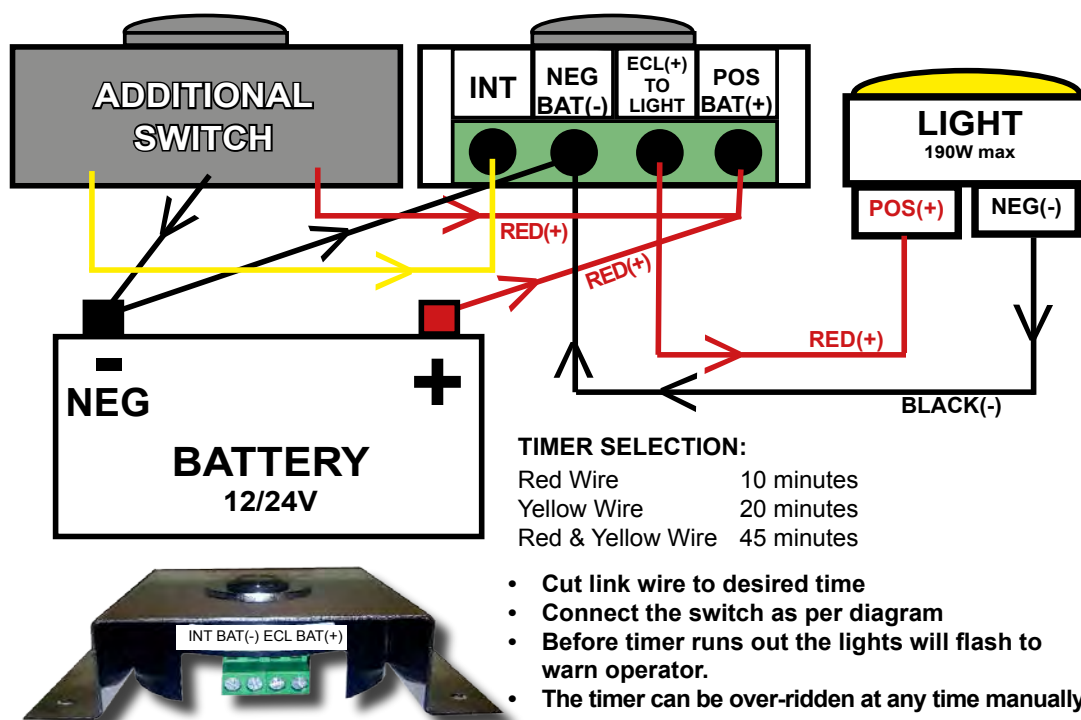
Slave switch for vehicles with more than one door. The timer circuit is controlled by the master switch.



TIMER SWITCHES & MODULES



STAINLESS STEEL SWITCH FITTING INSTRUCTIONS



TIMER SWITCHES & MODULES



This is a range of timer switches ideally suited to trailer applications where the lights or appliance only needs to be switched on for a specific period of time.

Built in warnings are available i.e. the 30 minute timer switch will flash the lights at 28 mins to alert the operator.

AVG10STSW12V 12V
10 second, 12V, Timer Switch

AVG10STSW24V 24V
10 second, 24V, Timer Switch

AVG30STSW12V 12V
30 second, 12V, Timer Switch

AVG30STSW24V 24V
30 second, 24V, Timer Switch

AVG6MTSW12V 12V
6 Minute, 12V, Timer Switch

AVG6MTSW24V 24V
6 Minute, 24V, Timer Switch

AVG30MTSW12V 12V
30 Minute, 12V, Timer Switch

AVG30MTSW24V 24V
30 Minute, 24V, Timer Switch

AVGW27833 12-24V
2 Way IP 10A Switch

AVGW27835 12-24V
Momentary Switch

AVGW27843 12-24V
3 Pin Socket

AVTPS24 24V

This device is a switch with built in 2hrs timer and voltage dropper, with an LED to show it is in operation. Designed for ticket machines on buses it converts 24V to 5.4V for 2hrs to operate ticket machines.

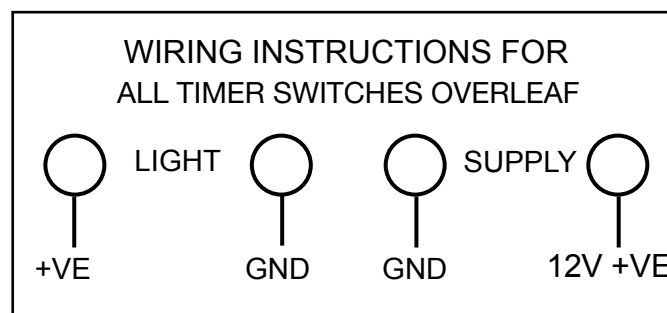
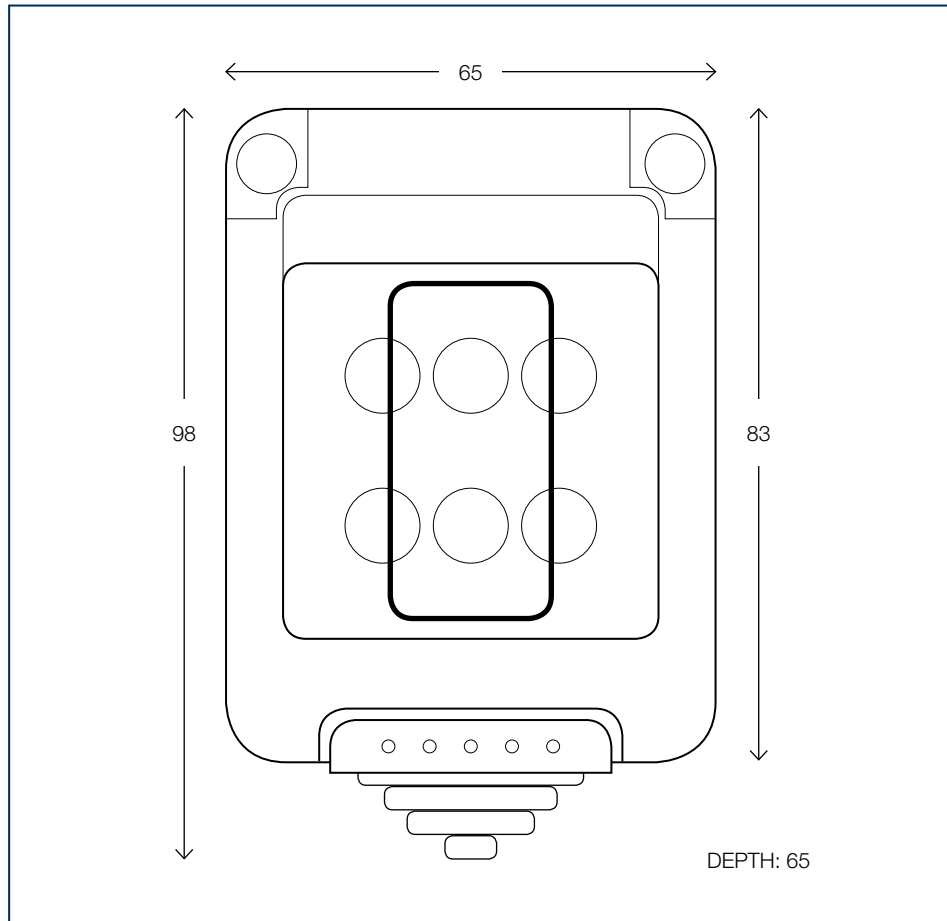


AVSPX01 12-24V

- Universal up/down hand control unit
- Magnetic back
- Comes complete with mounting base
- Ideal for tail lifts and recovery vehicles.



TIMER SWITCHES & MODULES



SWITCH & WARNING LIGHT PANEL MOUNTS



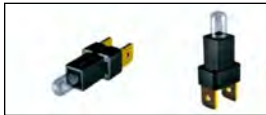
Sold Singly

**AVWL017 12V
Warning Lights**
With pre-fitted 12V bulb.
AVWL018 24V
With pre-fitted 24V bulb.



Sold Singly

**AVWL019 12V
Warning Lights**
With pre-fitted 12V bulb.
AVWL020 24V
With pre-fitted 24V bulb.



Pkt. 5

**AVROC12VB 12V
Bulb Holders**
With pre-fitted 12V bulb.
AVROC24VB 24V
With pre-fitted 24V bulb.



Pkt. 5

**AVROC12VLED 12V
LED Holders**
**AVROC24VLED 24V
LED Holders**

WARNING LIGHTS & SURROUNDS



AVWLA001 Amber
AVWLA002 Blue
AVWLA003 Green
AVWLA004 Red
Warning light fitted with
replaceable bulb, 12 Volt
bulb, 3 Watt.



AVWLA005 Amber
AVWLA006 Blue
AVWLA007 Green
AVWLA008 Red
Warning light with black
bezel and lucar terminals,
12 Volt bulb.



AVWLA009 Amber
AVWLA010 Blue
AVWLA011 Green
AVWLA012 Red
Warning light with chrome
bezel and lucar terminals,
12 Volt bulb.



AVWLA013 Red
AVWLA014 Blue
LED warning light with flying leads.
AVWLA015 Red
AVWLA016 Blue
Flashing LED warning light with
flying leads.

WARNING LIGHT SYMBOLS **Pkt. 5**

AVWLS001 AVWLS002 AVWLS003 AVWLS004 AVWLS005 AVWLS006 AVWLS007 AVWLS008 AVWLS009 AVWLS010



PANEL MOUNTING ACCESSORIES **All Supplied Singly**



**AVROCCONN2
Socket Housing**
For bulb housing,
Socket housing, 2 pole.



**AVMB3
Mounting Panel**
For 3 switches.



**AVROCCONN8
Socket Housing**
Socket housing, 8 pole.



**AVMB6
Mounting Panel**
Black, mounting aperture:
156 x 48.2mm For 6 switches.



**AVMBB
Cover Plug**
For closing empty
apertures in
mounting panel.



**AVMB1
Modular
Mounting
Panel System**
Middle piece.



**AVMB2
Modular Mounting Panel
System**
Black, 2 end pieces and 1 middle piece
are needed to make a mounting panel.
By adding middle pieces, this panel
can be extended as required.



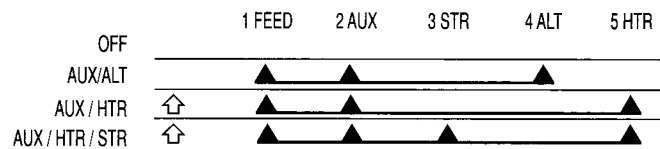
IGNITION SWITCH



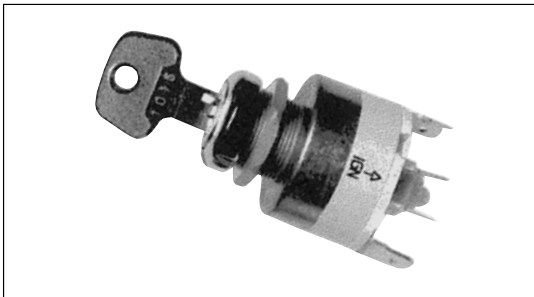
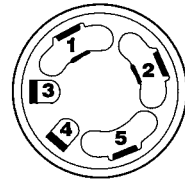
AVIGN1 12-24V AVIGN1K key for AVIGN1&3

Max. Current $\overline{12V}/\overline{24V}$

Circuit



4



AVIGN2 12-24V

- Universal ignition key switch
- Park/off/on/ignition

Guardian alternative IGN5

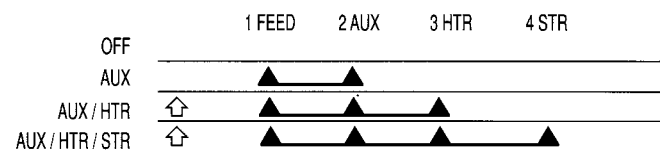
AVIGN2K key for AVIGN2



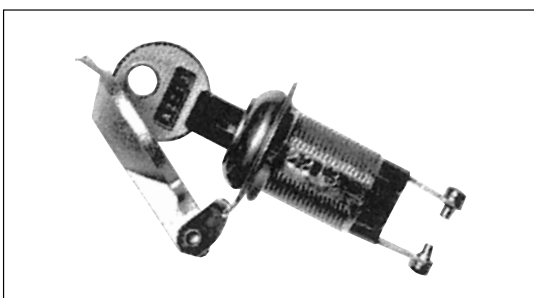
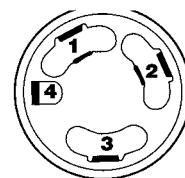
AVIGN3 12-24V

Max. Current $\overline{12V}/\overline{24V}$

Circuit



4

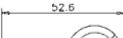


AVIGN7 12-24V

- On/off key switch
- Ideal for alarms etc

Guardian alternative IGN7

The logo is circular with a blue border. Inside the border, the text "AMBER VALLEY" is written in blue capital letters along the top arc, and "DEVELOPMENTS LLP" is written in blue capital letters along the bottom arc. In the center of the logo is a stylized globe showing the continents of North and South America in yellow. A blue koala is depicted sitting on the globe, holding a branch.

Type	Complete Switch	Key	Terminals
A			T: 30-58 5 Amps T: 30-17 35 Amps T: 30-15/54 35 Amps T: 30-19 50 Amps T: 30-50a 30 Amps
B			

Item Number	Diagram	Lid Type	Number of Terminals	Number of Positions	Pre-Heat Function	Anti Restart Function	Electrical Diagram
AVIGN5			10	5	✓	X	
AVIGN4			10	5	✓	✓	
AVIGN9			6	3	X	X	
AVIGN6(A) AVIGN8(B)			10	4	✓	X	
AVIGN10			7	3	X	✓	
AVIGN11			9	4	✓	✓	Item # AES-111-90A-1 (Merit # 330362) Same as AES-1111-90A, without Anti-restart
AVIGN12			4	2	X	X	(Merit # 326062)
AVIGN13			7	4	✓	X	
AVIGN14			7	4	✓	X	



BATTERY ISOLATOR SWITCHES



AVBIS001 12-24V Battery Isolator Switch

- 100AMP continuous load at 24V.
- 500AMP intermittent for 5 seconds.
- Removable key.
- Durite alternative 0-605-00.
- Guardian alternative BIS1.

AVBIS001K

Spare Key.



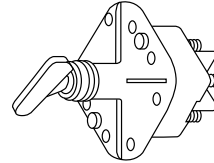
AVBIS001B

Waterproof cover for
AVBIS001 & AVBIS002



AVBIS006 12-24V Double Pole Battery Isolator Switch

- Removable key.
- Waterproof cover.
- 120AMP continuous 24V.
- 2000AMP intermittent.



AVBIS002 12-24V F.I.A. Battery Isolator Switch

- 100AMP continuous load at 24V.
- 500AMP intermittent for 5 seconds.
- Removable key.
- Durite alternative 0-605-90.
- Guardian alternative BIS2.

AVBIS002K

Spare Key.



AVBIS007 24V Double Pole Battery Isolator Switch

- Direct alternative for Lucas SSB100.
- Petrol regulations approved ADR 1999.
- 250AMP continuous.
- 2500AMP for 5 seconds.



AVBIS003 12-24V T.I.R. Battery Isolator Switch

- 250AMP continuous load at 24V.
- 2500AMP intermittent for 5 seconds.
- Removable key.
- Durite alternative 0-605-50.
- Guardian alternative BIS3.

AVBIS003K

Spare Key.

AVBIS008 24V

Double Pole Battery Isolator Switch

- Petrol regulations approved ADR 2003 sealed to IP67.
- 10 second delay to protect ECU.
- Can be switched on and off from vehicle cabin.
- 250AMP continuous.
- 2500AMP for 5 seconds.



AVBIS004 12-24V Fixed Key Battery Isolator Switch

- 100AMP continuous load at 24V.
- 500AMP intermittent for 5 seconds.
- Lucas alternative SSB106.
- Durite alternative 0-605-01.
- Guardian alternative SW50.



AVBIS005 12V Fixed Key Battery Isolator Switch

- Ideal for plant or marine applications.
- 300AMP continuous load at 12V.
- 1000AMP intermittent for 10 seconds.

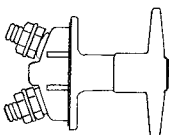


AVBIS008RS

24V

Double Pole Battery Isolator Switch & Remote Switch

- As above but with a Remote Switch



MINI MASTER BATTERY SWITCHES



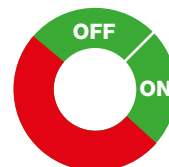
AVBISO09 12-48V AVBISO09K Spare Key

Operated via KEY

Bottom Cover YES

For application up to 48 Volts DC, can be in 2 positions or 4 positions, used with 1 battery or 2 batteries. Switch can be with knob or with removable key, with bottom cover for mounting panel use or without bottom cover for mounting through. Also available to be a combination set. ISO 8846 approval.

- Continuous Rating: 300 Amps
- Intermittent Rating: 1000 Amps/5 Seconds
- Crank Rating: 700 Amps/10 Seconds
- Inrush rating: 1500 Amps / ms
- Dimensions: 69 x 69 x 75h mm



AVBISO10 12-48V

Operated via KNOB

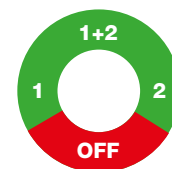
Bottom Cover YES



AVBISO11 12-48V

Operated via KNOB

Bottom Cover YES

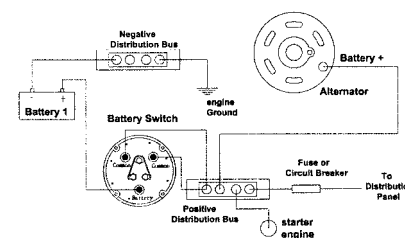


BATTERY DISCONNECT SWITCHES



AVBISO12 12-36V Master Battery Selector & Disconnect Switch

For application up to 36V DC, 2 positions. Rating: 310 Amps continuous. 500 Amps / 5mins.

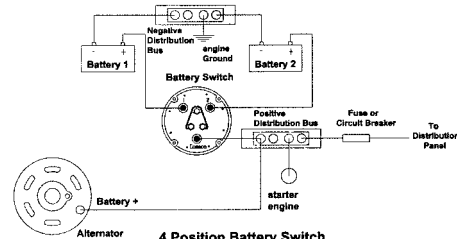


2 Position Battery Switch



AVBISO13 12-36V Master Battery Selector & Disconnect Switch

For application up to 36V DC, 4 positions-Both/1/2/Off. Rating: 310 Amps continuous. 500 Amps / 5mins.

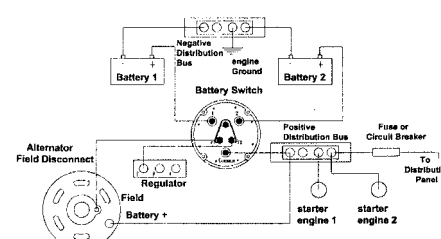


4 Position Battery Switch



AVBISO14 12-36V Master Battery Selector & Disconnect Switch with Key Lock.

For application up to 36V DC, 4 positions. Rating: 310 Amps continuous. 500 Amps / 5mins. Dimension: 160 x 160 x 70h cm. Plastic housing.



4 Position Battery Switch With AFD



BATTERY DISCONNECT SWITCHES



AVBISO15 12-24V **Emergency Stop Heavy Duty** **Push Button Battery Isolator Switch**

Twist connect, push to disconnect
250A Continuous @ 24V
Supplied Individually boxed.



AVBISO16 12-24V **Heavy Duty Fixed** **Handle Battery** **Isolator Switch**

250A Continuous @ 24V
Supplied Individually boxed.



AVBISO17 12-24V **Heavy Duty** **Removable Key** **Battery Isolator** **Switch**

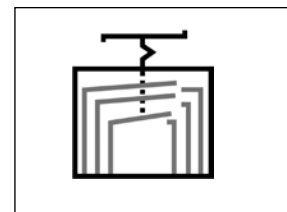
250A Continuous @ 24V
Supplied Individually boxed.

AVBISO17K **Spare Key**



AVBIS200091M 24V **Double Pole** **Battery Isolator Switch**

- Petrol regulations approved.
- Manual or pneumatic switch.
- 250AMP continuous load.
- 1000AMP intermittent for 5 seconds.
- Plastic fixed handle.
- Independent D + auxiliary circuit.
- Durite alternative 0-605-25.



AVBIS200091MECP **Spare Air cylinder for AVBIS200091M**



ROCKER SWITCHES



AVROC001

On/off round mini rocker switch, 10 Amp, 12V.

AVROC002 Amber

AVROC003 Green

AVROC004 Red

On/off LED spot illuminated round mini rocker switch, 10 Amp, 12V.



AVROC005

On/off rocker switch, round hole fitting, 16 Amp, 12V.

AVROC006 Amber

AVROC007 Blue

AVROC008 Green

AVROC009 Red

Illuminated On/off rocker switch, round hole fitting, 16 Amp, 12V



AVROC010 Amber

AVROC011 Blue

AVROC012 Green

Oval LED illuminated On/off rocker switch, round hole fitting, 16 Amp, 12V.

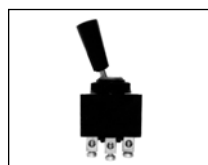
AVROC013 Amber

AVROC014 Green

AVROC015 Red

Oval spot illuminated On/off rocker switch, round hole fitting, 16 Amp, 12V.

TOGGLE SWITCHES



AVTOG001

On/off/on heavy duty toggle switch, screw terminals, 20 Amp.

AVTOG002

On/off toggle switch, 20 Amp. Lucar Terminals



AVTOG003

Flash/off heavy duty metal toggle switch with silver contacts and screw terminals, 25 Amp, 12V.

AVTOG004

On/off heavy duty metal toggle switch with silver contacts and screw terminals, 25 Amp, 12V. Also available: AVTOG005 waterproof cover for AVTOG004.



AVTOG009

On/off heavy duty metal toggle switch with silver contacts, 25 Amp, 12V.

AVTOG010

On/on metal toggle switch, lucar terminals, 25 Amp.

AVTOG011

On/off/on metal toggle switch, lucar terminals, 25 Amp.

AVTOG006 Amber

AVTOG007 Green

AVTOG008 Red

On/off/on heavy duty metal toggle switch with silver contacts and screw terminals, 25 Amp, 12V.

PULL SWITCHES



AVPUL001

Short on/off push/pull switch, 16 Amp, Screw terminal.

AVPUL002

Long on/off push/pull switch, 16 Amp, Screw terminal.

AVPUL003 Amber - AVPUL004 Blue

AVPUL005 Green - AVPUL006 Red

Illuminated push/pull switch, 16 Amp, 12V bulb, Lucar terminals.

PUSH SWITCHES



AVPUS001

Heavy duty die cast starter switch, momentary on, waterproof cover.



AVPUS002

Heavy duty momentary push switch, 16 Amp.



AVPUS003

Waterproof cover to fit AVK598.



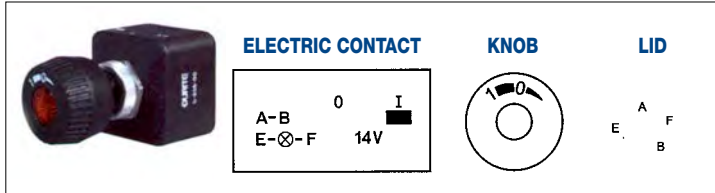
AVSPB106

Push switch, momentary on, lucar terminals, alternative to Lucas SPB106, 10 Amp.



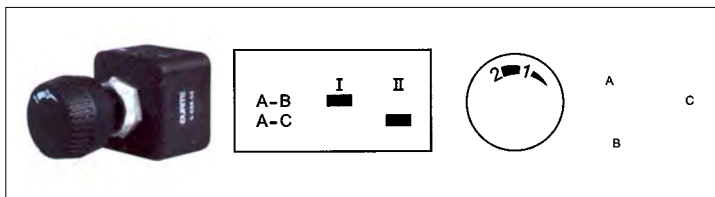
ROTARY SWITCHES

Part numbers AVROT001 - 005 splash proof to IP53 rating



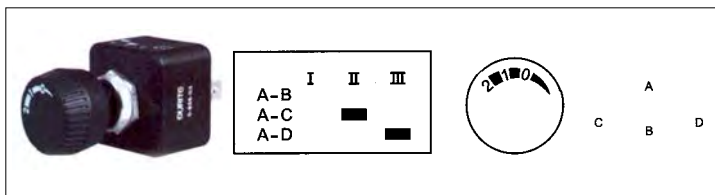
AVROT001 12V 10A

- On/off rotary switch
- Illumination (12V only)
- Supplied with red, amber and green lens
- Rated at 15 Amp (12V)
- 12 mm panel hole



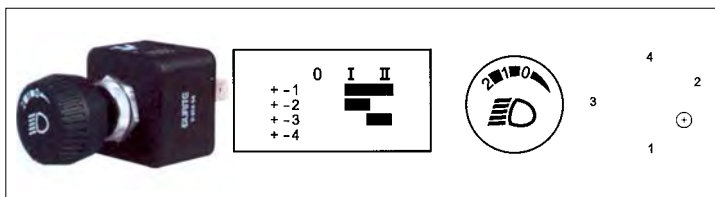
AVROT002 12V 10A

- On/off rotary switch
- Two position
- Rated at 15 Amp (12V)
- 12 mm panel hole



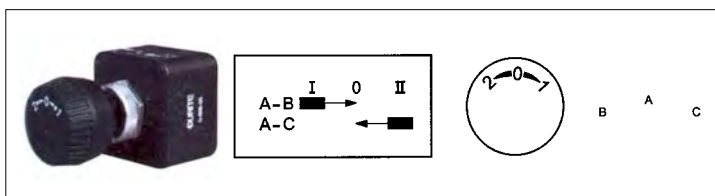
AVROT003 12V 10A

- Off/on/on rotary switch
- Three position
- Rated at 15 Amp (12V)
- 12 mm panel hole



AVROT004 12V 10A

- Off/side/headlamps rotary switch
- Three position
- Rated at 29 Amp (12V)
- 12 mm panel hole



AVROT005 12V 10A

- Momentary on/off/momentary on rotary switch
- Three position
- Rated at 15 Amp (12V)
- 12 mm panel hole



AVROT006

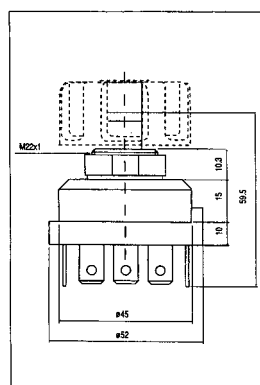
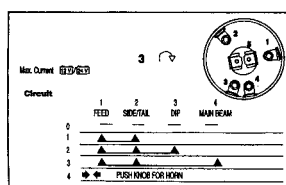
- On/off/on.
- Three position rotary switch
- Illuminated (green) lever
- Rated at 6 Amp (12V)
- 27 mm panel hole
- Screw terminals

AVROT007

- On/off/on
- Three position rotary switch
- Rated at 6 Amp (12V)
- 27 mm panel hole
- Screw terminals

AVROT008

- Off/on/on/on
- Four position rotary switch
- Rated at 11 Amp (12V)
- 27 mm panel hole
- Can be used as headlamp switch off/side/dip/main beam
- Screw terminals



AVS10900

- Lights/horn switch
- Ideal for plant applications
- Rotary switch for lights
- Push switch for horn

DOOR/ALARM SWITCHES



AVDS001
Round hole fitting
door switch
20 Amp, 12 Volt.



AVDS002
Round hole fitting
door switch, with long
arm, 20 Amp, 12 Volt.



AVDS005
Telescopic round hole
fitting door switch.



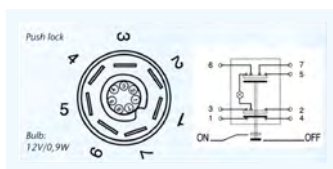
AVDS004
Round hole fitting
door switch.



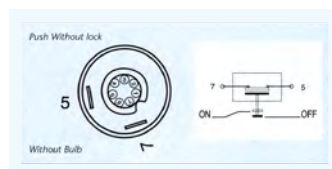
AVDS003
Round hole fitting
door/alarm switch with
extended arm (suitable
for cutting to length).

WARNING LIGHTS

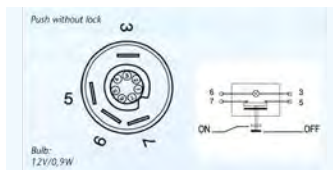
AVPUS004 Hazard 12-24V



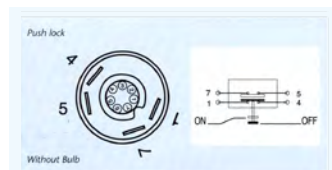
AVPUS008 Start 12-24V



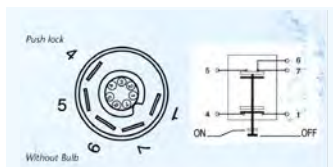
AVPUS005 Beacon 12-24V



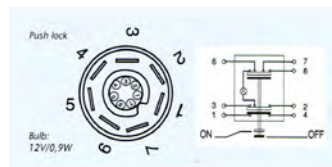
AVPUS009 Lift & Lower 12-24V



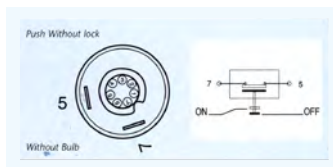
AVPUS006 Wiper 12-24V



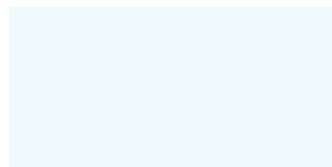
AVPUS010 Stop 12-24V



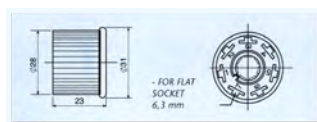
AVPUS007 Horn 12-24V



AVPUS011 Accessory 12-24V



AVPUS012 Switch Back



AVPUS013 12V Replacement Lamp

AVPUS014 24V Replacement Lamp



BUS BELL SWITCHES



AVPUS015 12-24V
Yellow - Pole Mount

AVPUS017 12-24V
Grey body - Pole Mount

AVPUS019 12-24V
Braille version - Pole Mount

AVPUS016 12-24V
Yellow - Surface Mount

AVPUS018 12-24V
Grey body - Surface Mount

AVPUS020 12-24V
Braille version - Surface Mount

SECTION 4

PARKING SENSOR SYSTEMS



PARKING SENSOR SYSTEMS.....	1
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SECTION 4

PARKING SENSOR SYSTEMS

We have a range of parking sensor systems that range from the basic audible only 2 sensor systems to the sophisticated dual voltage 4 Sensor Systems with DSM technology, LED and distance display with audio.

Our Prox 1 is our basic system 12 volt only suitable for passenger cars and car derived vans. Very reliable with stick on sensors.

We then have 2+4 sensor systems with through hole sensors for plastic bumpers 2+4 sensor systems with underslung sensors for metal bumpers These units do not have waterproof ECU's and therefore must be sited inside the vehicle.

2+4 sensor systems with through hole sensors for plastic bumpers

KxP = Underslung

2+4 sensor systems with through hole sensors for metal bumpers 2+4 sensor systems with underslung sensors for metal bumpers All waterproof ECU's for external mounting.

The 5300 and 6400 range all have DSM technology which means that the unit scans 360° every time it is activated to take tow bars, steps and rear door mounted wheels into consideration.

However it must always be stressed that sensors are designed to locate obstacles at their level not obstacles that protrude

KMP Through Hole Plastic Bumper

above ground level i.e. skips. You should also make sure that sensors are not mounted near an exhaust as the exhaust particles will cause interference and cause false readings.

If only 2 sensors are being used on a 4 Sensor System then always use the CL & CR sockets. If the display is to be mounted on the rear parcel shelf then the sensors must be connected as opposites to create the mirror image effect, i.e. CL sensor in CR socket.

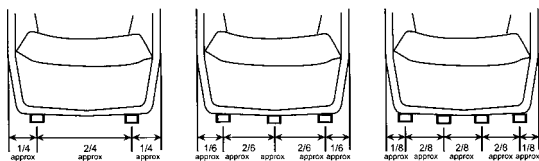
Spare parts are available for all units, please consult the catalogue.

KBFI Through Hole Metal Bumper

Install sensors

(1) Find proper positions

The ideal height to mount sensors is 45cm to 55cm where the bumper is vertical to the ground or a little bit facing upwards. Mark positions on the bumper as suggested below:



Some factors like shape of bumper, space behind bumper may affect your choosing positions. In case you need to install lower than 45cm or where the bumper is facing downwards, sensors with angled housing (e.g. Kb) or angle adjuster (e.g. Kx) are required.

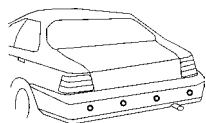
Note

1. Don't install sensors too close to exhaust pipe.
2. With DSM technology (Dynamic Scan Memory) in control module, grade A systems can ignore spare tyre or tow-hitch at the back of your vehicle.

(2) Amount sensors

I. Recessed sensors Km and Kp, Kmp, Kpb

Drill 22mm, 24mm or 24.5mm diameter holes as per the size of sensors. Push-fit the sensors into the holes. Make sure they fit well. To avoid damage, always ensure that there is enough clearance for the drill bit to emerge and enough depth for the sensor body when pushed into fully fitted position.



A too tight fitting may result in false alarm. Burnish the edge of the hole in case of too tight fitting.

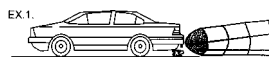
II. Screw-on sensors Kx, Kxp

Screw-on sensors are suitable for truck or bus, to be screwed underneath bodywork or on the round bar behind bodywork.

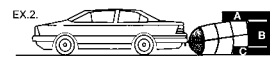
Each Kx sensor comes with 3 different angled rubber wedges, which can optionally be used to adjust the sensor angle if the mounting position would otherwise be too low.

Situation where obstacles may not be detected

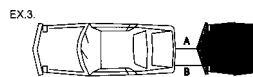
Due to the obstacle's position, angle or size, the reflected signal may not reach the receiving sensor. Complex reflections may also occur in a complex environment causing inaccurate detection. See examples 1, 2, 3, 4, 5 and 6.



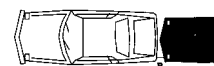
Low lying obstacles, e. g., kerb.



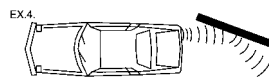
Complex environment: B and C will be detected but A cannot be detected



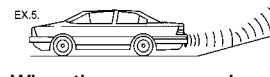
Distance A will be detected first, and then distance B detected when the car reverses close.



However, as the car reverses closer, A may fall into the sensor's blind zone. In such cases, the system will misjudge B as the closest distance.



When the car approaches a glass wall (or any other smooth surface) almost paralleled to the body of the car, the wall may not be detected as most of the signal is reflected away.



When the car approaches a smooth slope, the slope may not be detected.



The system may not detect a small and smooth round pole.

HAWKEYE PARKING SENSOR SYSTEM



AVPROX5300KBF1NEW

- 2 sensors through hole for metal bumpers
- PCB built into sensors to boost signal for optimum performance
- Waterproof ECU
- Digital distance display with buzzer
- DSM scanning technology
- 2 sensors system designed for trucks and buses
- Dual voltage
- This system is designed to suit all applications
- The sensor leads are 9" long to make changing damaged sensors a simple operation

Spare Parts



AVPROX5300ECU

Spare waterproof ECU for AVPROX5300 series complete with in line fuse holder.



AVPROXKBF1SENNEW Through hole sensor

Spare KBF1 Barrel (through hole) sensor for metal bumper with built in PCB to boost the signal to ECU.



AVPROXDISP Spare display unit

Spare display does not come with the extension lead as shown. Extension lead is sold as a separate item.

Technical specification

Control Box	
Item	Specification
Specified voltage	DC12V/24V
Operating voltage range	DC9.6V ~ 30V
Standby current	Below 100mA
Operating current	Below 200mA
Operating temperature	-25°C ~ 80°C
Storage temperature	-30°C ~ 85°C
Operating frequency	40KHz ± 2KHz

Sensor	
Item	Specification
Operating voltage range	AC 90 ~ 130V ^{P-P}
Operating temperature	-25°C ~ 80°C
Storage temperature	-30°C ~ 85°C
Operating frequency	40KHz ± 2KHz
Detection angle	120° Horizontal 60° Vertical
Detection method	Ultrasonic wave

Problem	Reason	Solution
System does not work when reverse gear is engaged	Bad connection of main power lead	Check power lead
	Bad jack connection	Reconnect all jacks
Audio alarm/same distance displayed continuously		Reset the system
	Sensor detects the ground	Adjust angle of sensor installation
Not any audio alarm when obstacle is in detection range		Reset the system
	Bad sensor connection	Reconnect sensors
False alarm	Sensor detects the ground	Adjust angle of sensor installation



HAWKEYE PARKING SENSOR SYSTEM



AVPROX5300SPECNEW

- 4 sensors through hole for metal bumpers
- PCB built into sensors to boost signal for optimum performance
- Waterproof ECU
- DSM scanning technology
- 4 sensors system designed for heavy trucks and buses
- Dual voltage
- This is the ultimate parking sensor system.
- The sensor leads are 9" long to make changing damaged sensors a simple operation

Spare Parts



AVPROX5300SPEC ECU

Spare waterproof ECU for AVPROX5300SPEC only.



AVPROXKBF1SENNEW

Spare KBF1 Barrel (through hole) sensor for metal bumper with built in PCB to boost the signal to ECU.

Technical specification

Control Box	
Item	Specification
Specified voltage	DC12V/24V
Operating voltage range	DC9.6V ~ 30V
Standby current	Below 100mA
Operating current	Below 200mA
Operating temperature	-25°C ~ 80°C
Storage temperature	-30°C ~ 85°C
Operating frequency	40KHz ± 2KHz

Sensor	
Item	Specification
Operating voltage range	AC 90 ~ 130V ^{P-P}
Operating temperature	-25°C ~ 80°C
Storage temperature	-30°C ~ 85°C
Operating frequency	40KHz ± 2KHz
Detection angle	120° Horizontal 60° Vertical
Detection method	Ultrasonic wave

Problem	Reason	Solution
System does not work when reverse gear is engaged	Bad connection of main power lead	Check power lead
	Bad jack connection	Reconnect all jacks
Audio alarm/same distance displayed continuously		Reset the system
	Sensor detects the ground	Adjust angle of sensor installation
Not any audio alarm when obstacle is in detection range		Reset the system
	Bad sensor connection	Reconnect sensors
False alarm	Sensor detects the ground	Adjust angle of sensor installation

HAWKEYE PARKING SENSOR SYSTEM



AVPROX6400KBF1NEW

- 4 sensors through hole for metal bumpers
- PCB built into sensors to boost signal for optimum performance
- Waterproof ECU
- Digital distance display with buzzer
- DSM scanning technology
- 4 sensors system designed for heavy trucks and buses
- Dual voltage
- This is the ultimate parking sensor system.
- The sensor leads are 9" long to make changing damaged sensors a simple operation

Spare Parts



AVPROX6400ECUNEW

Spare waterproof ECU for AVPROX6400 series complete with in line fuse holder.



AVPROXKBF1SENNEW

Spare KBF1 Barrel (through hole) sensor for metal bumper with built in PCB to boost the signal to ECU.



AVPROXDISP Spare display unit

Spare display does not come with the extension lead as shown
Extension lead is sold as a separate item.

Technical specification

Control Box	
Item	Specification
Specified voltage	DC12V/24V
Operating voltage range	DC9.6V ~ 30V
Standby current	Below 100mA
Operating current	Below 200mA
Operating temperature	-25°C ~ 80°C
Storage temperature	-30°C ~ 85°C
Operating frequency	40KHz ± 2KHz

Sensor	
Item	Specification
Operating voltage range	AC 90 ~ 130V ^{P-P}
Operating temperature	-25°C ~ 80°C
Storage temperature	-30°C ~ 85°C
Operating frequency	40KHz ± 2KHz
Detection angle	120° Horizontal 60° Vertical
Detection method	Ultrasonic wave

Problem	Reason	Solution
System does not work when reverse gear is engaged	Bad connection of main power lead	Check power lead
	Bad jack connection	Reconnect all jacks
Audio alarm/same distance displayed continuously		Reset the system
	Sensor detects the ground	Adjust angle of sensor installation
Not any audio alarm when obstacle is in detection range		Reset the system
	Bad sensor connection	Reconnect sensors
False alarm	Sensor detects the ground	Adjust angle of sensor installation



HAWKEYE PARKING SENSOR SYSTEM



AVPROX6400KXPNEW

- 4 sensors underslung for mounting under bumpers or trailer back bars
- PCB built into sensors to boost signal for optimum performance
- Waterproof ECU
- Digital distance display with buzzer
- DSM scanning technology
- 4 sensors system designed for heavy trucks and buses
- Dual voltage
- This is the ultimate parking sensor system.
- The sensor leads are 9" long to make changing damaged sensors a simple operation

Spare Parts



AVPROX6400ECU

Spare waterproof ECU for AVPROX6400 series complete with in line fuse holder.



AVPROX6400KXPSEN

Spare KXP sensor (underslung) complete with built in PCB to boost the signal to ECU.



AVPROXDISP Spare display unit

Spare display does not come with the extension lead as shown. Extension lead is sold as a separate item.

Technical specification

Control Box	
Item	Specification
Specified voltage	DC12V/24V
Operating voltage range	DC9.6V ~ 30V
Standby current	Below 100mA
Operating current	Below 200mA
Operating temperature	-25°C ~ 80°C
Storage temperature	-30°C ~ 85°C
Operating frequency	40KHz ± 2KHz

Sensor	
Item	Specification
Operating voltage range	AC 90 ~ 130V ^{P-P}
Operating temperature	-25°C ~ 80°C
Storage temperature	-30°C ~ 85°C
Operating frequency	40KHz ± 2KHz
Detection angle	120° Horizontal 60° Vertical
Detection method	Ultrasonic wave

Problem	Reason	Solution
System does not work when reverse gear is engaged	Bad connection of main power lead	Check power lead
	Bad jack connection	Reconnect all jacks
Audio alarm/same distance displayed continuously		Reset the system
	Sensor detects the ground	Adjust angle of sensor installation
Not any audio alarm when obstacle is in detection range		Reset the system
	Bad sensor connection	Reconnect sensors
False alarm	Sensor detects the ground	Adjust angle of sensor installation

HAWKEYE PARKING SENSOR SYSTEM



AVPROX6400TRAIL Trailer System with LED Marker Lights

- 4 sensors through hole for metal bumpers
- PCB built into sensors to boost signal for optimum performance
- Waterproof ECU
- DSM scanning technology
- 4 sensors system designed for heavy trucks and buses
- Dual voltage
- This is the ultimate parking sensor system.
- The sensor leads are 9" long to make changing damaged sensors a simple operation

This system was specifically developed for articulated vehicle trailers. It is particularly useful when tractors are being "shunted" by dock spotters as the unit is trailer mounted and the warning lights are visible in the rear view mirrors.

It can utilise either KXP, KMP or KBF1 sensors. An ideal use is 2 KXP sensors on the bottom and a KBF1 in the centre top of the trailer, it alerts the driver if the trailers are double parked that there may be a chiller unit on the rear trailer avoiding costly damage.

Technical specification

Control Box	
Item	Specification
Specified voltage	DC12V/24V
Operating voltage range	DC9.6V ~ 30V
Standby current	Below 100mA
Operating current	Below 200mA
Operating temperature	-25°C ~ 80°C
Storage temperature	-30°C ~ 85°C
Operating frequency	40KHz ± 2KHz

Sensor	
Item	Specification
Operating voltage range	AC 90 ~ 130V ^{P-P}
Operating temperature	-25°C ~ 80°C
Storage temperature	-30°C ~ 85°C
Operating frequency	40KHz ± 2KHz
Detection angle	120° Horizontal 60° Vertical
Detection method	Ultrasonic wave

Spare Parts



AVPROXTL1
L/H Trailer Lamp Led



AVPROXTL2
R/H Trailer Lamp Led



AVPROXTL LEAD
Special splitter cable
for LED Trailer Lamps

Problem	Reason	Solution
System does not work when reverse gear is engaged	Bad connection of main power lead	Check power lead
	Bad jack connection	Reconnect all jacks
Audio alarm/same distance displayed continuously		Reset the system
	Sensor detects the ground	Adjust angle of sensor installation
Not any audio alarm when obstacle is in detection range		Reset the system
	Bad sensor connection	Reconnect sensors
False alarm	Sensor detects the ground	Adjust angle of sensor installation



HAWKEYE PARKING SENSOR SYSTEM

8 Sensor, 4 Front + 4 Rear Sensors



AVPROX8300

8 sensor system, 4 front sensors and 4 rear sensors complete with display to avoid confusion.

- PCB built into sensors to boost signal for optimum performance
- Digital distance display with buzzer
- DSM scanning technology
- Dual voltage
- The sensor leads are 9" long to make changing damaged sensors a simple operation

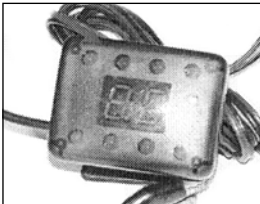
Spare Parts



AVPROX8300ECU



AVPROX8300SEN



AVPROX8300DISP

Sensors marked L1, CL1, CR1, R1 to be connected to the 4 plugs marked F mounted on the top of the ECU.



AVPROX8300LEAD

Sensors marked L2, CL2, CR2, R2 to be connected to the 4 plugs marked R mounted on the bottom of the ECU.

Technical specification

Control Box	
Item	Specification
Specified voltage	DC12V/24V
Operating voltage range	DC9.6V ~ 30V
Standby current	Below 100mA
Operating current	Below 200mA
Operating temperature	-25°C ~ 80°C
Storage temperature	-30°C ~ 85°C
Operating frequency	40KHz ± 2KHz

Sensor	
Item	Specification
Operating voltage range	AC 90 ~ 130V ^{P-P}
Operating temperature	-25°C ~ 80°C
Storage temperature	-30°C ~ 85°C
Operating frequency	40KHz ± 2KHz
Detection angle	120° Horizontal 60° Vertical
Detection method	Ultrasonic wave

Problem	Reason	Solution
System does not work when reverse gear is engaged	Bad connection of main power lead	Check power lead
	Bad jack connection	Reconnect all jacks
Audio alarm/same distance displayed continuously		Reset the system
	Sensor detects the ground	Adjust angle of sensor installation
Not any audio alarm when obstacle is in detection range		Reset the system
	Bad sensor connection	Reconnect sensors
False alarm	Sensor detects the ground	Adjust angle of sensor installation

HAWKEYE PARKING SENSOR SYSTEM



LIST OF SPARE CABLE LENGTHS & APPLICATIONS

SENSOR EXTENSION LEADS

AVPROX19NEW	2.5M EXTENSION LEAD
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AVPROX22NEW	4.5M EXTENSION LEAD
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DISPLAY EXTENSION LEADS

AVPROX20NEW	8.0M EXTENSION LEAD
--------------------	--------------------------------

AVPROX21NEW	15.0M EXTENSION LEAD
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SENSOR HOLE SAWS

AVPROXDRILL18	18MM HOLE SAW
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AVPROXDRILL22	22MM HOLE SAW
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SECTION 5

DIRECT VISION STANDARD



DIRECT VISION STANDARD	1
SPEED AND INDICATOR MODULE COMBINED	3
LED WARNING LIGHTS	7
SIDEMINDER SYSTEMS	11
NIMBUS BANKSMAN AND DOWNLIGHTER SYSTEMS	15



Référence: E13*10R00*10R05*14301*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 30 mars 2017

Communication concernant:⁽¹⁾
Communication concerning:



- la délivrance d'une homologation
approval granted
- l'extension d'homologation
approval extended
- le refus d'homologation
approval refused
- le retrait d'homologation
approval withdrawn
- l'arrêt définitif de la production
production definitively discontinued

d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of electrical/electronic sub-assembly with regard to Regulation N° 10

Numéro d'homologation par type:
Approval number:

E13*10R00*10R05*14301*00

Marque d'homologation:
Approval mark:

10R - 05 14301

1. Fabricant: (marque commerciale du constructeur):
Make (trade name of manufacturer): Amber Valley Developments LLP
2. Type:
Type: AVCSWL01
Dénomination(s) commerciale(s) générale(s):
General commercial description(s): LED message light
Version(s)/Variante(s):
Version(s)/Variant(s): AVCSWL02
AVCSWL03
AVCSWL04
3. Moyens d'identification du type, s'ils sont marqués sur le véhicule / composant / entité technique⁽³⁾:
Means of identification of type, if marked on the vehicle / component / separate technical unit: See item 6.



Référence: E13*10R00*10R05*14305*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 05 avril 2017

Communication concernant:⁽¹⁾
Communication concerning:



- la délivrance d'une homologation
approval granted
- l'extension d'homologation
approval extended
- le refus d'homologation
approval refused
- le retrait d'homologation
approval withdrawn
- l'arrêt définitif de la production
production definitively discontinued

d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of electrical/electronic sub-assembly with regard to Regulation N° 10

Numéro d'homologation par type:
Approval number:

E13*10R00*10R05*14305*00

Marque d'homologation:
Approval mark:

10R - 05 14305

1. Fabricant: (marque commerciale du constructeur):
Make (trade name of manufacturer): Amber Valley Developments LLP
2. Type:
Type: ATESCOECUV2
Dénomination(s) commerciale(s) générale(s):
General commercial description(s): ECU
Version(s)/Variante(s):
Version(s)/Variant(s): AVJB02
AVNIMBUSECU1
AVNIMBUSECU2
ECUV2
3. Moyens d'identification du type, s'ils sont marqués sur le véhicule / composant / entité technique⁽³⁾:
Means of identification of type, if marked on the vehicle / component / separate technical unit: See item 6.
- 3.1. Emplacement de ce marquage:
Location of that marking: See item 6.



Référence: E13*10R00*10R05*14405*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 24 juillet 2017

Communication concernant:⁽¹⁾
Communication concerning:



- la délivrance d'une homologation
approval granted
- l'extension d'homologation
approval extended
- le refus d'homologation
approval refused
- le retrait d'homologation
approval withdrawn
- l'arrêt définitif de la production
production definitively discontinued

d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of electrical/electronic sub-assembly with regard to Regulation N° 10

Numéro d'homologation par type:
Approval number:

E13*10R00*10R05*14405*00

Marque d'homologation:
Approval mark:

10R - 05 14405

1. Fabricant: (marque commerciale du constructeur):
Make (trade name of manufacturer): Amber Valley Developments LLP
2. Type:
Type: AVRWAL01
Dénomination(s) commerciale(s) générale(s):
General commercial description(s): Nimbus System ECU
Version(s)/Variante(s):
Version(s)/Variant(s): Not applicable
3. Moyens d'identification du type, s'ils



Référence: E13*10R00*10R05*14319*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 06 avril 2017

Communication concernant:⁽¹⁾
Communication concerning:



- la délivrance d'une homologation
approval granted
- l'extension d'homologation
approval extended
- le refus d'homologation
approval refused
- le retrait d'homologation
approval withdrawn
- l'arrêt définitif de la production
production definitively discontinued

d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of electrical/electronic sub-assembly with regard to Regulation N° 10

Numéro d'homologation par type:
Approval number:

E13*10R00*10R05*14319*00

Marque d'homologation:
Approval mark:

10R - 05 14319

1. Fabricant: (marque commerciale du constructeur):
Make (trade name of manufacturer): Amber Valley Developments LLP
2. Type:
Type: AVLSMHUB with AVSPLIM02, AVSMMOD1 and AVJB01
Dénomination(s) commerciale(s) générale(s):
General commercial description(s): Hub system with speed limiter, indicator module and junction box
Version(s)/Variante(s):
Version(s)/Variant(s): AVSHPHUB, AVALIHUB, AVSPLIM01, ARKLSM, ARKLTM
3. Moyens d'identification du type, s'ils sont marqués sur le véhicule / composant / entité technique⁽³⁾:
Means of identification of type, if marked on the vehicle / component / separate technical unit: See item 6.
- 3.1. Emplacement de ce marquage:
Location of that marking: See item 6.

One Stop Shop For ALL Your DVS Requirements

What is DVS? – The Direct Vision Standard is safety legislation from Transport for London. From 26th October 2020, HGVs over 12T need a Safety Permit to enter Greater London. Visit [tfl.gov.uk](https://www.tfl.gov.uk) for more info.

HGVs WITHOUT A PERMIT ENTERING GREATER LONDON WILL BE FINED.





DIRECT VISION STANDARD

AVDVSS1

Standard DVS Kit

Contains:

AVBS1S	Blind Spot Take Care Label
AVBSK1	Blind Spot Kit
AVCAMSYS1COMP	1 Side Camera + 7 Inch Monitor



Standard DVS kit includes our speed limiting and indicating hub, making the entire kit plug & play.

This kit has 3 main advantages:

- 1) System completely tested to guarantee components function correctly prior to fitting.
- 2) Simpler to fit as plug & play, never need to go behind the dashboard again.
- 3) Fault finding is simpler in the eventuality of a breakdown.

In many cases this can be performed over the phone saving expensive down time.

AVDVSS2

Superior DVS Kit

Contains:

AVBS1S	Blind Spot Take Care Label
AVBSK4	Blind Spot Kit + Alarmlight
AVCSWL03	Square LED Cycle Light
AVDEL07	Push On/Off Instant Module
AVCAMSYS2COMP	Side & Rear Camera + 7 Inch Monitor



**Audible and visual kit to increase awareness for VRU Vulnerable Road Users.
25% increase in fatalities due to VRUs wearing headphones.**

SPEED AND INDICATOR MODULE COMBINED



AVSLSM KIT



PLUG & PLAY

This is the latest innovation from Amber Valley to complement the AVSPLIM01 Speed Module which turns components off above a predetermined speed and automatically back on once the vehicle speed has reduced below the predetermined speed.

The AVSMMOD1 Indicator Module which converts the pulsed output from the indicator circuit to a constant output allowing the vehicle to fit left/right turn alarms, sensor systems, cameras or a whole variety of products. The ECU will work with any products from any proprietary manufacturer.

There is no need to connect the Speed Module to the Indicator Module, eliminating masses of cables under the dashboard, simplifying fitting and reducing fitting labour costs.

The system is fully function tested and as it is waterproof does not need to be fitted in cab. There are a number of speed settings available which are preset at the factory. Once selected, they cannot be changed.



SPEED AND INDICATOR MODULE COMBINED



E.C.U. Plug & Play Wiring Hub

MADE IN THE U.K.



SAVING HOURS AM

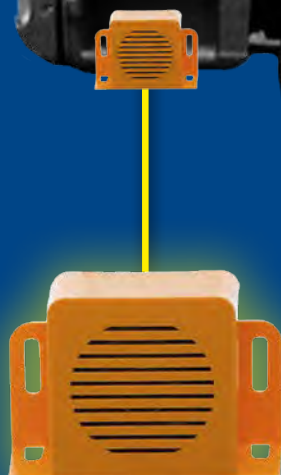
R1 FOUR-WAY

- 1 Red Ignition
- 2 Black Ground
- 3 Blue Left indicator
- 4 Green Reverse

L1 FOUR-WAY

- 1 Red
- 2 Black } Left turn alarm
- 3 Red
- 4 Black } Side sensors

YOUR ONE STOP SH



*Sideminder®
Indicator
Alarm*



*Sideminder®
Sensor System*

SPEED AND INDICATOR MODULE COMBINED



L.E.D. Message Lights



AND £S ON EVERY INSTALLATION



IN SIX-WAY

- 1 Red Ignition
- 2 Black Ground
- 3 Blue Left indicator
- 4 White Right indicator
- 5 Yellow Speed input
- 6 Green Reverse

PLUG & PLAY

SHOP FOR BLINDSPOT ELIMINATION



*Indicator
Alarmlight®*



*L.E.D. Cycle
Warning Light*



SPEED AND INDICATOR MODULE COMBINED

COMPONENT PARTS

AVLSMECU



This ECU contains the Indicator Module and the speed module. The speed is set in the factory and cannot be changed after potting. It has Superseal type connectors and is fully sealed and each connector is identified R1, L1 and IN to eliminate any possible confusion. The ECU has been tested and type-approved for on and off highway. See certificate below.

AVLSMECUR1LEADASSYOE



There are two variations of these lead assemblies, one for use with our equipment, plugs both ends, and one for after market use.

AVLSMECUR1LEADASSYAM



AVLSMECUL1LEADASSYOE



AVLSMECUL1LEADASSYAM



AVLSMECUINLEADASSY

This lead is universal fitting.



GRAND-DUCHÉ DE LUXEMBOURG
Ministère du Développement durable
et des Infrastructures
Département des Transports
L-2008 Luxembourg

SOCIÉTÉ NATIONALE DE
CERTIFICATION ET D'HOMOLOGATION
Régistre de Commerce: B 27180
L-8201 Sandweiler
snch

Référence: E13*10R00*10R05*14319*00
Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 06 avril 2017

Communication concernant:⁽¹⁾
Communication concernant:
E13

- la délivrance d'une homologation
approuvée grand
- l'extension d'homologation
approuvée limitée
- le refus d'homologation
approuvée limitée
- le retrait d'homologation
approuvée limitée
- l'arrêt définitif de la production
production définitivement interrompue

d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of electrical/electronic sub-assembly with regard to Regulation N° 10

Numéro d'homologation par type: E13*10R00*10R05*14319*00
Approval number:
Marque d'homologation: **E13** 10R - 05 14319
Approval mark:

1. Fabricant: (marque commerciale du constructeur):
Make (trade name of manufacturer): Amber Valley Developments LLP

2. Type:
Type: AVLSMGHUB with AVSPLIM02, AVSMMOD1 and AVZB01

Dénomination(s) commerciale(s) générale(s):
General commercial description(s): Hub system with speed limiter, indicator module and junction box

Variante(s)/Variante(s):
Variant(s)/Variant(s): AVSBBWHUB, AVAALHUB, AVSPLIM01, ARKLSM, ARKLTM

3. Moyens d'identification du type, s'ils sont marqués sur le véhicule /
component / unité technique⁽³⁾:
Means of identification of type, if marked on the vehicle / component / separate technical unit: See item 6.

3.1. Emplacement de ce marquage:
Location of the marking: See item 6.

Page 1 of 5

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Fax: +44 (0)116 240 2941
Email: sales@amber-valley.co.uk
Website: www.amber-valley.co.uk

L.E.D. CYCLE LAMP BLIND SPOT PROTECTION



NEW & IMPROVED

AVCSWL01
(RED LENS)

AVCSWL03
(CLEAR LENS)

AVCSWL05
(RED LENS – NO LOGO)



AVCSWL02
(RED LENS)

AVCSWL04
(CLEAR LENS)

AVCSWL06
(RED LENS – NO LOGO)



SELF TESTS FOR DRIVER INSPECTION

E13 10R-0514301

1 METRE CABLE

NEW POLYCARBONATE TRAY LENS,

**BOARD POTTED IN PLACE, LIGHT IS
COMPLETELY SEALED.**

**TOUGH RUBBER HOUSING BONDED TO
STAINLESS STEEL BACKPLATE.**

**DUAL VOLTAGE HIGH POWERED
LONG LIFE LEDS.**

**HIGH POWERED LEDS FLASH
WHEN INDICATOR IS ON.**

**LEDS REDUCED OUTPUT AT NIGHT
TO AVOID DAZZLING.**

COMPLETELY SEALED FOR LIFE UNIT.

**SIMPLY THE BEST QUALITY AND
VALUE FOR MONEY LIGHT.**



L.E.D. CYCLE LAMP BLIND SPOT PROTECTION

Circuit board and cable are sealed in potting making the unit completely waterproof.

The lens is polycarbonate.



The light is then fitted to the rubber housing which is designed to protect the light from vibration and “body bounce” associated with empty trailers.

The rubber body is moulded directly to the stainless steel plate which gives strength to the light.

The light is laser marked with all the required markings including date of manufacture.



FITTING INSTRUCTIONS

- | | | |
|-------------------|---|----------------------------------------------------|
| Brown Wire | - | Earth |
| White Wire | - | Permanent Feed |
| Red Wire | - | Indicator (triggers the unit) |
| Green Wire | - | Sidelight (reduced power to avoid dazzling) |

L.E.D. CYCLE LAMP BLIND SPOT PROTECTION



NEW

AVCSWL09
(SMOKED LENS)

**Ideal Light for
School Minibuses,
Home Delivery Vans
and Coaches
Surface Mounts**



AVCSWL10
(SMOKED LENS)





L.E.D. WARNING LAMP BLIND SPOT PROTECTION

NEW

AVCSWL11
(RED LENS))

AVCSWL13
(CLEAR LENS)

AVCSWL12
(RED LENS))

AVCSWL14
(CLEAR LENS)



**TOUGH RUBBER HOUSING BONDED TO
STAINLESS STEEL BACKPLATE.**

**CIRCUIT BOARD COATED WITH EPOXY
ON REAR.**

**CIRCUIT BOARD FRONT COATED WITH
CLEAR EPOXY.**

**DUAL VOLTAGE HIGH POWERED
LONG LIFE LEDS.**

**HIGH POWERED LEDS FLASH
WHEN INDICATOR IS ON.**

**LEDS REDUCED OUTPUT AT NIGHT
TO AVOID DAZZLING.**

SIDEMINDER SYSTEMS

Saving Lives Every Day



As Europe's leading manufacturer of reversing safety systems we are proud to put our reputation behind this product.

Remember – it tells you what is happening unlike some systems that rely on the driver to be constantly vigilant as well as driving. The Amber Valley SIDEMINDER system tells those that matter, when it matters most!

“WARNING, this vehicle is turning LEFT!”

“WARNING, this vehicle is turning RIGHT!”

UK/left-hand drive roads

Continental/right-hand drive roads

There are over 400 people killed every year throughout Europe from near-side turning collisions. Typically these accidents occur at side road junctions or roundabouts. These accidents can easily be avoided with the new Amber Valley SIDEMINDER System!

The SIDEMINDER System comes complete with a master and two slave speaker units, as well as a complete wiring harness to connect the units together. The unit is activated when the indicators are in operation.

The SIDEMINDER System is quick and easy to install and designed to protect those around the vehicle! For noise sensitive areas, the SIDEMINDER System has a night silent function which can be wired through the sidelights or a switch on the dashboard. The unit knows when the hazard lights are in operation and automatically mutes.

“The best value for money audible safety system on the market today!”

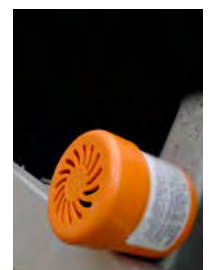
- Complete with its own wiring harness (in non-split conduit) – does not interfere with Can-Bus, Multiplex or Pet-Reg systems
- Kit includes an on dash mute facility as standard
- Does not rely on motion or proximity sensors / cameras, it simply works every time you indicate to turn left (or right for the continental system)
- “Warning, this vehicle is turning left” message (UK)
- Master unit and 3 slaves means the message can be heard on the largest vehicle
- Automatically knows when hazard lights are on and automatically mutes itself to avoid confusion and excessive noise pollution
- Can be wired through our speed sensing module
- Can be programmed in any language message on a WAV file.



Sideminder System Spare Parts

AVSM15CLH
AVSM15CLHM
AVSM15CRHM
AVSM15CLHS
AVSM15CRHS

- Complete Wiring Harness
- (Left Hand) Master Unit
- (Right Hand) Master Unit
- (Left Hand) Slave Unit
- (Right Hand) Slave Unit



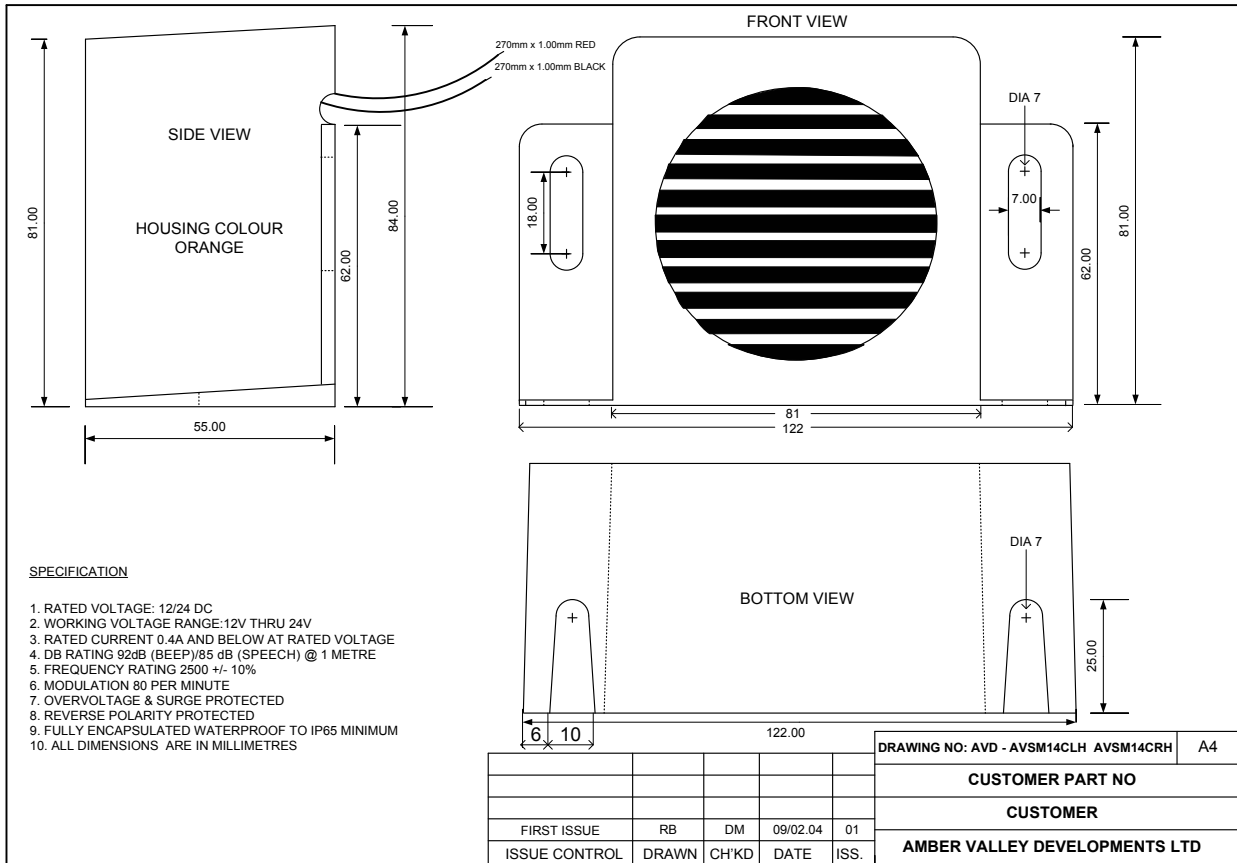
There are two types of harness – one is utilising three core cable, the other utilises three cables in non-split conduct.

Both are fitted with Tyco Suspended connectors.



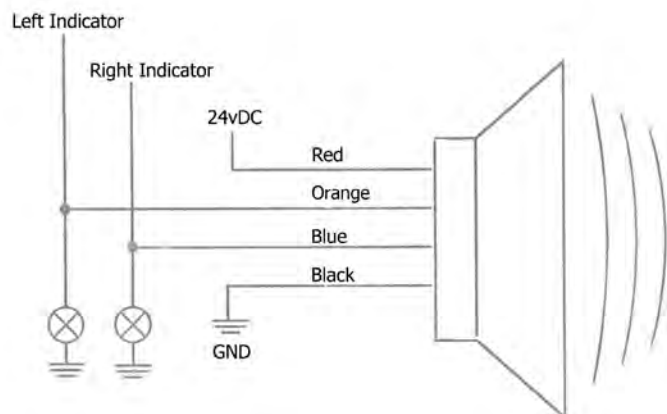
SIDEMINDER SYSTEMS

Saving Lives Every Day



Fitting Instructions

- Please ensure all wiring connections are sealed to prevent water ingress
- All wiring should be adequately protected using conduit where necessary. Avoid running wires across moving parts
- Siren should be positioned facing outwards towards the near side of the road to ensure maximum volume level for pedestrians / cyclists. Do not cover the siren



IP67 rated
Rated Voltage: 24vDC
Max current draw: 250mA

SIDEMINDER SYSTEMS

Saving Lives Every Day



Sideminder Single

AVSM14CLH 12-24V

Single unit ideal for small vehicles
where 1 alarm will suffice
UK Spec – LEFT TURN

AVSM14CRH 12-24V

Single unit ideal for small vehicles
where 1 alarm will suffice
European Spec – RIGHT TURN

Technical specification

Volts	dB level	Frequency	Current
12-24	85 dB	Speech	0.5 mA

Suitable for: Trucks, coaches, buses, rigid bodies



- CE & emc marked
- Epoxy sealed for greater durability against water and vibration
- M.I.R.A. Tested for all on and off Highway Applications Pressure Washable IP67
- Night silent through side lights or on dash switch.
- Automatically mutes when hazards are in operation to avoid confusion and noise pollution.

Sideminder Complete System

AVSM15CLH 12-24V

Complete system, master unit +
2 slaves and wiring harness.
UK Spec – LEFT TURN

AVSM15CRH 12-24V

Complete system, master unit +
2 slaves and wiring harness.
European Spec – RIGHT TURN

Technical specification

Volts	dB level	Frequency	Current
12-24	85 dB	Speech	0.5 mA

Suitable for: Trucks, coaches, buses, rigid bodies, articulated trailers

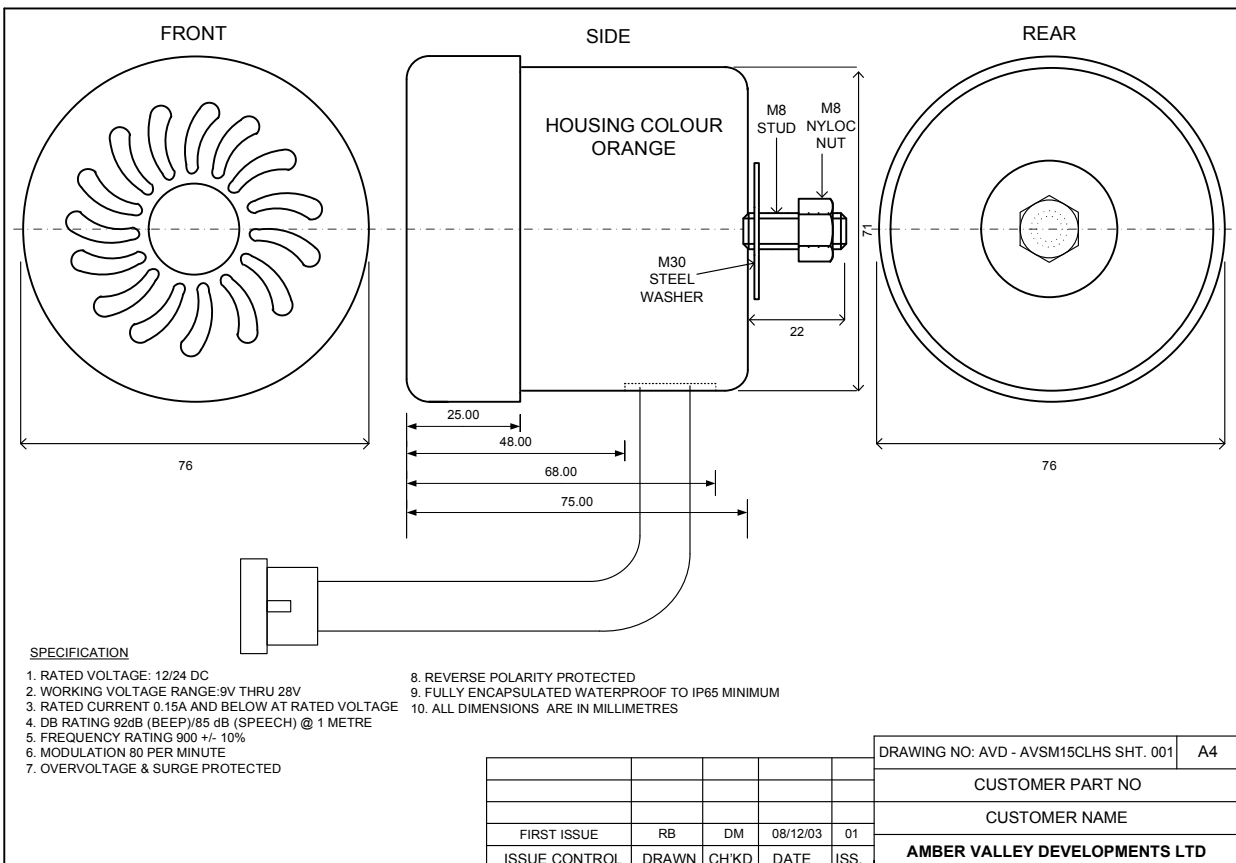
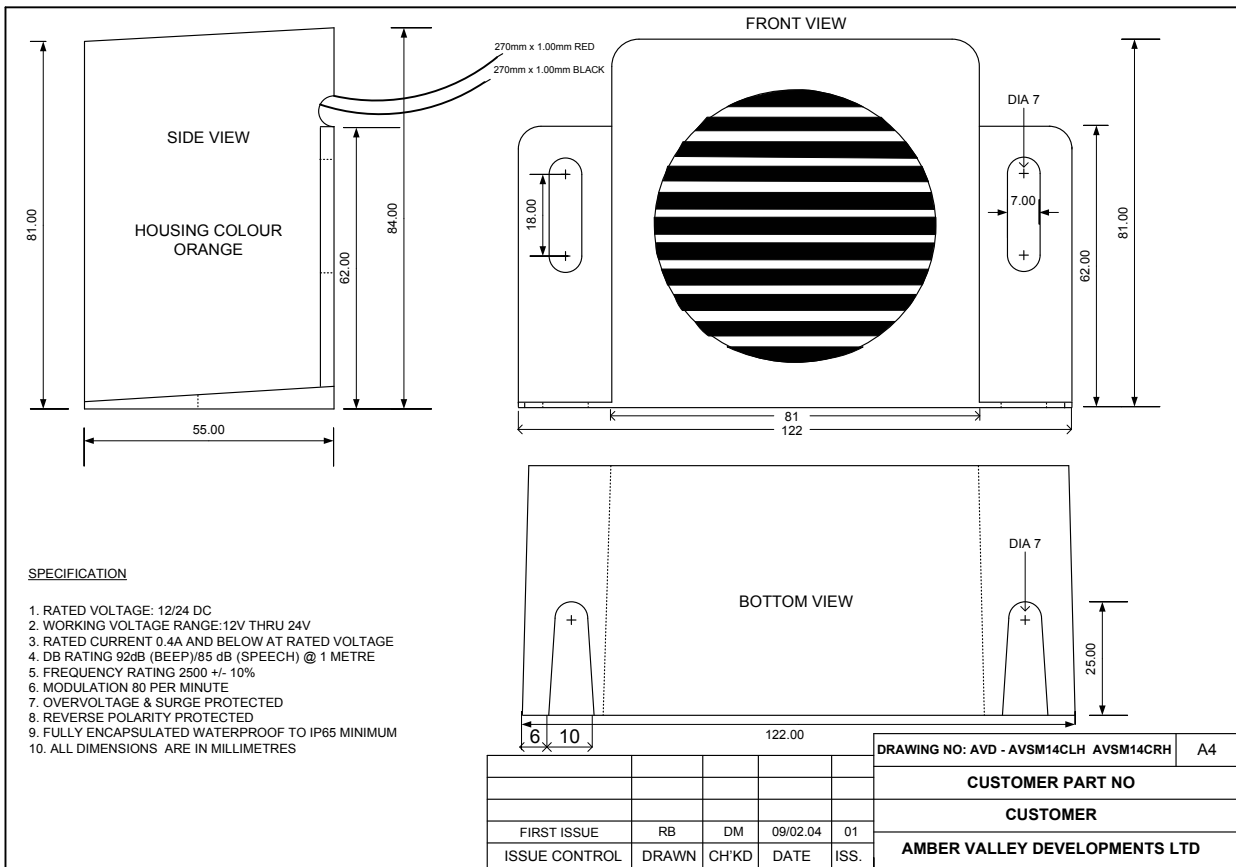


- CE & emc marked
- Epoxy sealed for greater durability against water and vibration
- M.I.R.A. Tested for all on and off Highway Applications Pressure Washable IP67
- Night silent through side lights or on dash switch
- Automatically mutes when hazards are in operation to avoid confusion and noise pollution
- Completely sealed harness with amp superseal connectors



SIDEMINDER SYSTEMS

Saving Lives Every Day



NIMBUS MANOEUVRING LIGHTS

Patented Safety Lighting System



EUROPE'S LARGEST MANUFACTURER OF REVERSING AND VULNERABLE ROAD USER SAFETY DEVICES



AVAWL01 - REG 23

Nimbus Manoeuvring Light

- Reg 23 Manoeuvring Light
- Max power - 9W
- 10R Approved
- IP69K Rated
- 1035 LM
- E57 23ML00 0001

Without Nimbus



With Nimbus

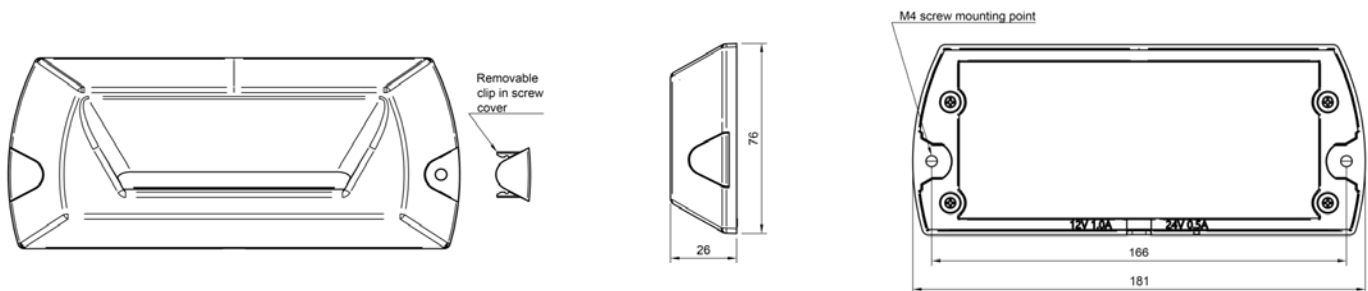




NIMBUS MANOEUVRING LIGHTS

Patented Safety Lighting System

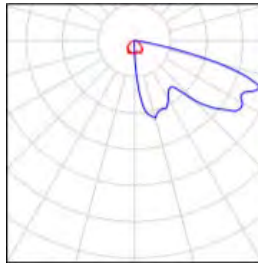
Dimensions



Optical Performance

Horizontal Illuminance

@ 1.5m



Light output ratio 68.53%
Lamp luminous flux 1035lm
Luminaire luminous flux 709lm
Luminous efficacy 83.4lm/w

WHITE

Colour	White
LED	12 x Lumileds 3030 2D
I _A	85mA
V _F	5.81V
LED Power	5.92W
Total Power	9W
Total LED Flux	1035lm
Total System Flux	709lm

Mechanical Characteristics

- Tough Durable Housing
- Dual Voltage 12v 24v
- Tough Polycarbonate Inner Housing Lens
- 12 LEDs
- Vibration, Dust & Corrosion Resistant
- Reverse Polarity Protection
- Over-Voltage Protection to Prevent Voltage Spike Damage
- 1m Twin Cable

NIMBUS MANOEUVRING LIGHTS

Patented Safety Lighting System



EUROPE'S LARGEST MANUFACTURER OF REVERSING AND VULNERABLE ROAD USER SAFETY DEVICES



AVAWL01D/L - REG 10

Nimbus Dual Purpose Light

- Dual Colour - Amber powered from Indicator circuit
- Manoeuvring and Downlighter combined
- Max power - 9W White 3.5W Amber
- 10R Approved
- IP69K Rated
- 1035 LM
- E57 10R-05 0026

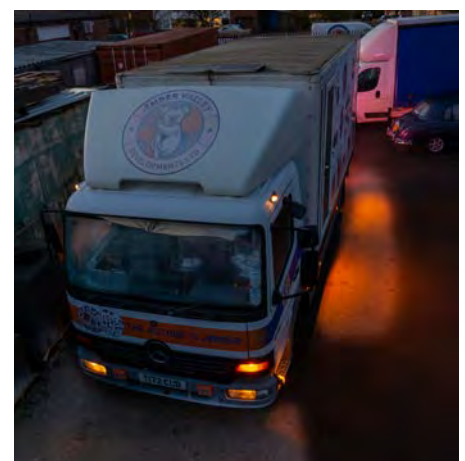
With Nimbus



Without Nimbus



With Downlighter

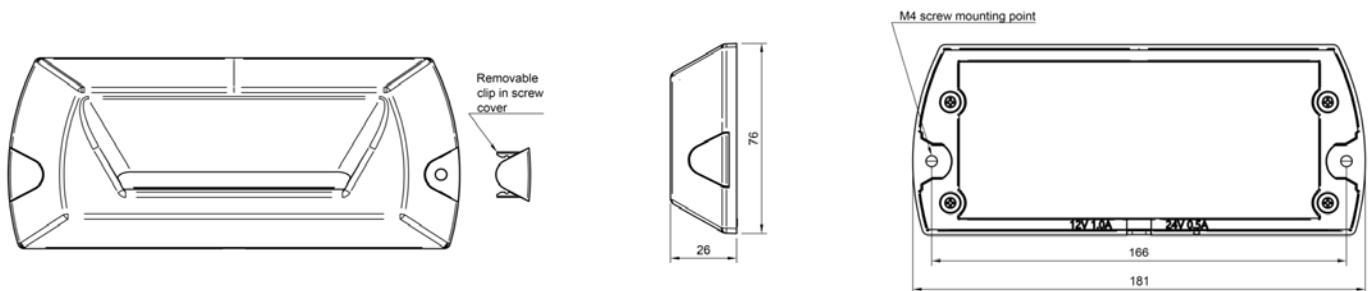




NIMBUS MANOEUVRING LIGHTS

Patented Safety Lighting System

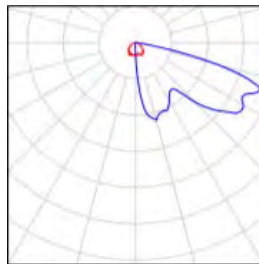
Dimensions



Optical Performance

Horizontal Illuminance

@ 1.5m



Light output ratio 68.53%
Lamp luminous flux 1035lm
Luminaire luminous flux 709lm
luminous efficacy 83.4lm/w

WHITE

Colour	White
LED	12 x Lumileds 3030 2D
I _A	85mA
V _F	5.81V
LED Power	5.92W
Total Power	9W
Total LED Flux	1035lm
Total System Flux	709lm

AMBER

Colour	Amber
LED	4 x Lumileds 3535L PC
I _A	170mA
V _F	3.28V
LED Power	2.23W
Total Power	3.5W
Total LED Flux	221lm
Total System Flux	151lm

Mechanical Characteristics

- Tough Durable Housing
- Dual Voltage 12v 24v
- Tough Polycarbonate Inner Housing Lens
- 12 LEDs + 4 Amber LEDs
- Vibration, Dust & Corrosion Resistant
- Reverse Polarity Protection
- Over-Voltage Protection to Prevent Voltage Spike Damage
- 1m Twin Cable

NIMBUS WARNING LIGHT SYSTEM®

Patent No.



- Provides a Continuous Ring of Light
- No darkspots
- Complete With Vehicle Specific Wiring Harness
- Waterproof Indicator And Speed Control Unit
- Dual Colour Led Lights Fully Sealed
- Stainless Steel Mounting Brackets





NIMBUS WARNING LIGHT SYSTEM®

Patent No.



The Nimbus Warning Light System® is a dual light system which we believe provides a valuable addition to both blind spot elimination and reversing safety.

The system basically provides a complete line of amber light along both sides of the vehicle, which stays on below a predetermined speed, over that speed the lights do not work.

When the vehicle is turning left or right the amber lights on the corresponding side flash in a different flash pattern and the opposite side turn off to highlight the manoeuvre. The amber lights do not work if the hazard lights are being used to avoid confusion.



When reverse gear is selected the amber lights will not operate but the white lights will override the function and provide a complete uninterrupted ring of light around the vehicle making reversing a much safer manoeuvre.

The red rear canopy lights work only on the side lights and also automatically switch off when in reverse.

This system is completely controlled by its patent applied for ECU which controls all the inputs and has a vehicle specific wiring harness.



SECTION 6

BATTERY MANAGEMENT



VOLTAGE CONVERTERS	1
BATTERY PROTECTION	7
Charge Guards, Programmable Charge Guards	
START GUARDS	15
Intelligent Split Charge Devices, Tail Lift Protection	
POWER PROTECTORS.....	21
Cut Battery Off to Avoid It Becoming Discharged	
RUN LOCK SYSTEMS	25



Ministère du Développement durable
et des Infrastructures
Département des Transports

L-2938 Luxembourg

Registre de Commerce: B 27180



L-5201 Sandweiler

Référence: E13*10R05/01*14777*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 04 juillet 2018

Communication concernant:⁽²⁾
Communication concerning:



d'un type de sous-ensemble électrique/électronique
of a type of electrical/electronic

Numéro d'homologation par type:
Approval number:

Marque d'homologation:
Approval mark:

1. **Fabricant: (marque commerciale du constructeur):**
Make (trade name of manufacturer):
2. **Type:**
Type:

Dénomination(s) commerciale(s) générale(s):
General commercial description(s):

Version(s)/Variante(s):
Version(s)/Variant(s):
3. **Moyens d'identification du type, s'ils sont marqués sur le véhicule / composant / entité technique⁽²⁾:**
Means of identification of type, if marked on the vehicle / component / separate technical unit:
- 3.1. **Emplacement de ce marquage:**
Location of that marking:

Page 1 of 5

- la délivrance d'une homologation



Ministère du Développement durable
et des Infrastructures
Département des Transports

L-2938 Luxembourg

Registre de Commerce: B 27180



L-5201 Sandweiler

Référence: E13*10R05/01*14776*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 04 juillet 2018

Communication concernant:⁽²⁾
Communication concerning:

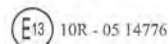


d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of electrical/electronic sub-assembly with regard to Regulation N° 10

Numéro d'homologation par type:
Approval number:

E13*10R05/01*14776*00

Marque d'homologation:
Approval mark:



- la délivrance d'une homologation
approval granted
- l'extension d'homologation
approval extended
- le refus d'homologation
approval refused
- le retrait d'homologation
approval withdrawn
- l'arrêt définitif de la production
production definitely discontinued

1. **Fabricant: (marque commerciale du constructeur):**
Make (trade name of manufacturer): Amber Valley Developments LLP
2. **Type:**
Type: DCDC10

Dénomination(s) commerciale(s) générale(s):
General commercial description(s): Voltage Converter

Version(s)/Variante(s):
Version(s)/Variant(s): DCDC15
3. **Moyens d'identification du type, s'ils sont marqués sur le véhicule / composant / entité technique⁽²⁾:**
Means of identification of type, if marked on the vehicle / component / separate technical unit: See item 6.
- 3.1. **Emplacement de ce marquage:**
Location of that marking: See item 6.

Page 1 of 5

VOLTAGE CONVERTERS



AVDCDC5 24-12V

Switch Mode



- 5 amp continuous load
- 10 amp intermittent load
- Switch mode
- Non isolated return for radios/mobile phones

AVDCDC10 24-12V

Switch Mode



- 10 amp continuous load
- 15 amp intermittent load
- Switch mode
- For multiple applications
- Non isolated return

AVDCDC15 24-12V

Switch Mode



- 15 amp continuous load
- 22 amp intermittent load
- Switch mode
- For hi-power CD/DVD applications
- Non isolated return

Technical specification

Part No	AVDCDC5	AVDCDC10	AVDCDC15
Continuous load	5 A	10 A	15 A
Intermittent load	10 A	15 A	22 A
Quiescent current mA	18	18	18
Input voltage VDC	20-32	20-32	20-32
Suitable for	Radio cassette players, mobile phones, CD players	Hi-power audio systems	Multiple applications

All our units are overcurrent, overheat, overvoltage, transient and reverse polarity protected.

Suitable for: Trucks, coaches, buses.





VOLTAGE CONVERTERS

IDEAL FOR BREAKDOWN VEHICLES

AVDCDC3 24-12V



Switch Mode

- This is a plug and socket combination designed to make it possible for a 24V vehicle to tow a 12V trailer without having to modify either the vehicle or the trailers.
- Combines 24 volt NPlug which is moulded to a 12 volt NSocket all the necessary electronics are enclosed in the unit.

AVDCDC7 24-12V



Switch Mode

- Designed for 24V vehicle towing a 12V trailer
- Reduces the voltage on every circuit to 12V
- Fully encapsulated against vibration, dust and water.
- EMC Tested. 10R-0514300
- Applications between towing vehicle and trailer must be checked before using this device especially if the towing vehicle has bulb failure warning

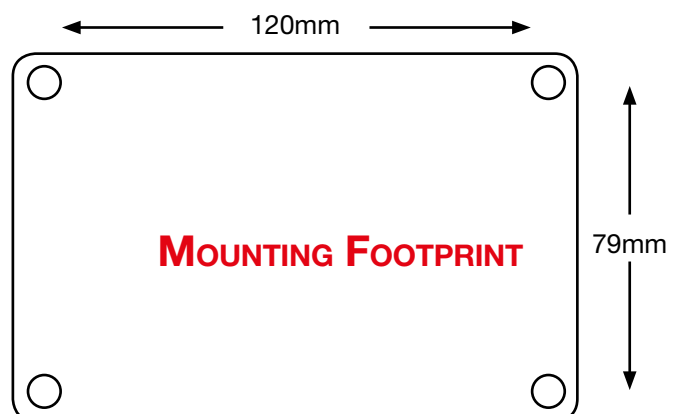
Wiring Instructions

Fit AVDCDC7 to a suitable surface making sure not to strain the cables.

CABLE COLOURS

YELLOW	LEFT HAND INDICATOR
BLUE	FOG
WHITE	GROUND
GREEN	RIGHT HAND INDICATOR
BROWN	RIGHT HAND TAIL
RED	BRAKE
BLACK	LEFT HAND TAIL
ORANGE	TELL TALE

**ORANGE OUTPUT WHEN INDICATOR IS ON,
DOES NOT WORK WITH LED LIGHTS.**





Ministère du Développement durable
et des Infrastructures
Département des Transports

L-2938 Luxembourg

Registre de Commerce: B 27180

L-5201 Sandweiler



Référence: E13*10R00*10R05*14300*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 30 mars 2017

Communication concernant:⁽²⁾
Communication concerning:




- la délivrance d'une homologation
approval granted
- l'extension d'homologation
approval extended
- le refus d'homologation
approval refused
- le retrait d'homologation
approval withdrawn
- l'arrêt définitif de la production
production definitely discontinued

d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of electrical/electronic sub-assembly with regard to Regulation N° 10

Numéro d'homologation par type:
Approval number:

E13*10R00*10R05*14300*00

Marque d'homologation:
Approval mark:

 10R - 05 14300

1. **Fabricant: (marque commerciale du constructeur):**
Make (trade name of manufacturer): Amber Valley Developments LLP
2. **Type:**
Type: AVDCDC7

Dénomination(s) commerciale(s) générale(s):
General commercial description(s): Voltage Dropper 24 V to 12 V system

Version(s)/Variante(s):
Version(s)/Variant(s): None
3. **Moyens d'identification du type, s'ils sont marqués sur le véhicule / composant / entité technique⁽²⁾:**
Means of identification of type, if marked on the vehicle / component / separate technical unit: See item 6.
- 3.1. **Emplacement de ce marquage:**
Location of that marking: See item 6.



Ministère du Développement durable
et des Infrastructures
Département des Transports

L-2938 Luxembourg

Registre de Commerce: B 27180

L-5201 Sandweiler



Référence: E13*10R00*10R05*14401*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 13 juillet 2017

Communication concernant:⁽²⁾
Communication concerning:



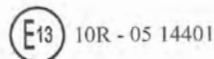
- la délivrance d'une homologation
approval granted
- l'extension d'homologation
approval extended
- le refus d'homologation
approval refused
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approval withdrawn
- l'arrêt définitif de la production
production definitely discontinued

d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of electrical/electronic sub-assembly with regard to Regulation N° 10

Numéro d'homologation par type:
Approval number:

E13*10R00*10R05*14401*00

Marque d'homologation:
Approval mark:



1. **Fabricant: (marque commerciale du constructeur):**
Make (trade name of manufacturer): Amber Valley Developments LLP
2. **Type:**
Type: AVLED01P
Dénomination(s) commerciale(s) générale(s):
General commercial description(s): LED Ballast
Version(s)/Variante(s):
Version(s)/Variant(s): AVLED01S
3. **Moyens d'identification du type, s'ils sont marqués sur le véhicule / composant / entité technique⁽²⁾:**
Means of identification of type, if marked on the vehicle / component / separate technical unit: See item 6.
- 3.1. **Emplacement de ce marquage:**
Location of that marking: See item 6.

VOLTAGE CONVERTERS

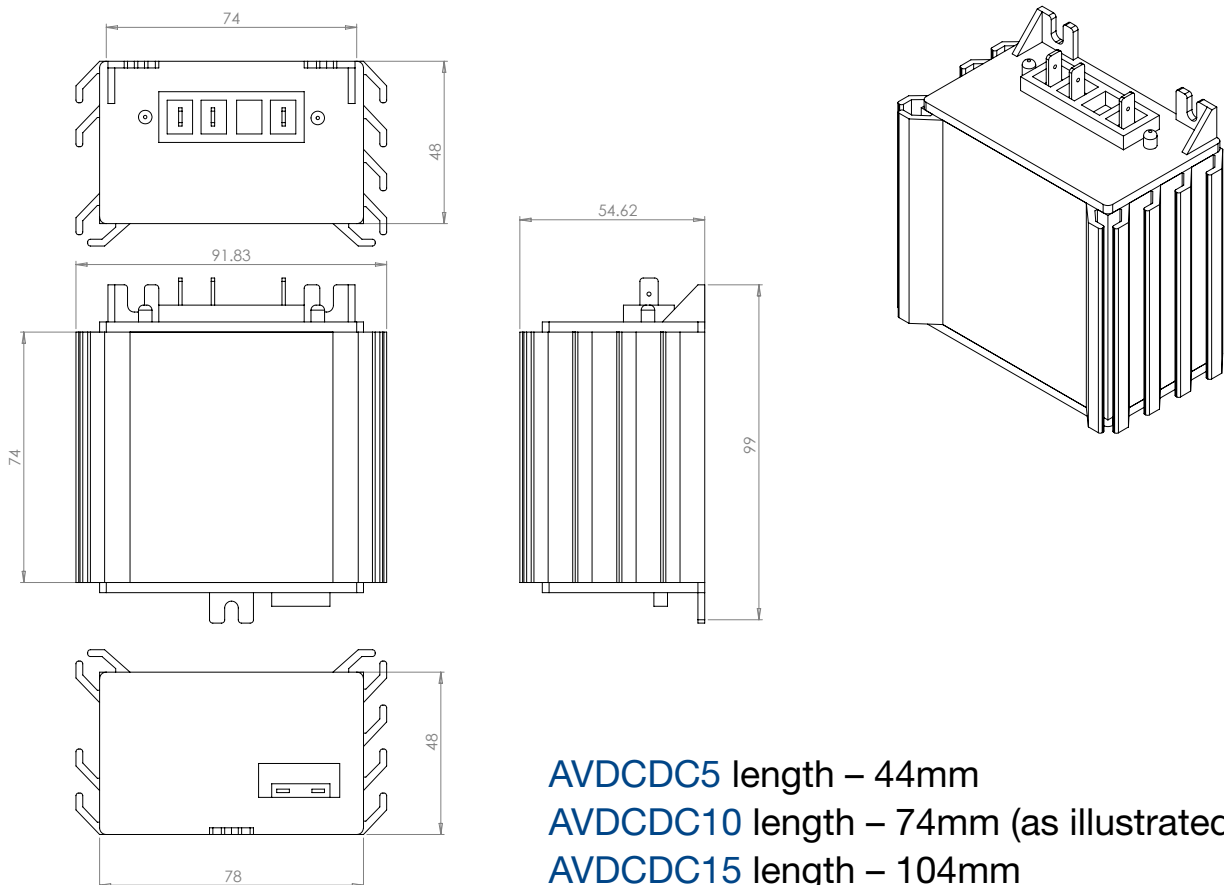


Voltage Dropper LED operation (AVDCDC5, AVDCDC10 & AVDCDC15)

- Left LED is shining 'Green' = Input voltage and fuse OK
- Left LED is shining 'Red' = Replace fuse
- Right LED is shining 'Red' = Output voltage is ok
- Right LED is not operational = Output problem

Wiring Instructions

- 24V supply to +24V IN terminal
- Both 24V and 12V earth to – terminal (common earth)
- 12V positive supply from +12V OUT terminal





L.E.D. BALLAST

AVLED01S 12V



LED Ballast Socket

The LED ballast socket is designed to eliminate the bulb failure warning becoming activated on tractors which are towing trailers with LED lights.

It mimics the load of normal lights and compensates for the low power consumption of LED lights. It will therefore give the driver/operator confidence that should the bulb failure warning light come on in the cab it will NOT be a false alarm.

The unit can be fitted to the vehicle in the normal manner as well as the normal socket so the normal socket can be used for bulb lights and the LED Ballast Socket for LED lights, so the tractor can utilise any type of trailer.

- Comes complete with 1 metre of 7 core cable
- Electronics are fully encapsulated against water and vibration
- Extra long mounting screws for ease of fitting
- Socket can be replaced if damaged

AVLED01P 12V



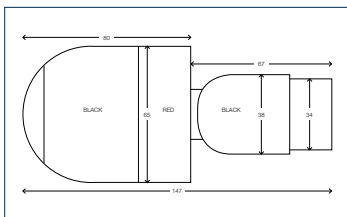
LED Ballast Socket and Plug

The LED ballast socket is designed to eliminate the bulb failure warning becoming activated on tractors which are towing trailers with LED lights.

It mimics the load of normal lights and compensates for the low power consumption of LED lights. It will therefore give the driver/operator confidence that should the bulb failure warning light come on in the cab it will NOT be a false alarm.

The unit is designed for multi-vehicle use where it can be plugged into the tractor towing socket and then the LED trailer is plugged into it.

- Comes with plug moulded
- Electronics are fully encapsulated against water and vibration
- Socket can be replaced if damaged
- Solid state electronics
- Encapsulated to withstand water, oil and vibration



These units have been designed for use on vehicles where the trailers may use LED lights. It has built-in ballast resistors to eliminate the bulb failure warning becoming active on the towing vehicle.

There are two versions:

A hard-wired version which can be fitted to the trailer at the front and the trailer wiring taken from there or our universal unit which simply plugs into the normal towing socket on the tractor, and the LED trailer is connected into the rear socket.

This unit is versatile as it can be moved from one towing vehicle to another. Built-in thermister to stop excessive overheating. The unit shuts down to prevent damage. Unit recovers when it cools down.

**THESE UNITS DO GET HOT AND THEREFORE INDICATOR
AND ESPECIALLY HAZARD LIGHTS
SHOULD NOT BE LEFT ON UNNECESSARILY.**

BATTERY PROTECTION

Charge Guards



AVSPC10 12V 70 AMP
AVSPC20 24V 50 AMP



These units are ideally suited to 12V or 24V vehicles where “under bonnet” space is at a premium. They come complete with a **3M** mounting pad.

It senses when the engine is running and allows the charge through to the auxiliary battery, when the engine is switched off it will monitor the voltage coming from the starting battery. When the voltage drops to 12.6V (AVSPC10) or 25.2V (AVSPC20) the unit will separate and isolate the batteries guaranteeing sufficient power in the starting battery to start the vehicle when the voltage has dropped to a predetermined level.

The unit now has a one minute timer built in to eliminate damaging relay chatter caused by a flat auxiliary battery putting too much strain on the unit.

12 Volt 70 Amp Voltage Controlled Relay

Operating voltage	13.4V to 12.6V
Pin configuration	1 + main (starting) battery 2 + auxiliary battery 3 - ground

24 Volt 50 Amp Voltage Controlled Relay

Operating voltage	26.8V to 25.2V
Pin configuration	1 + main (starting) battery 2 + auxiliary battery 3 - ground

AVSPC11 12V 70 AMP
AVSPC21 24V 50 AMP



Newly launched are the AVSPC11 and AVSPC21. These units are exactly the same specification as AVSPC10 and AVSPC20 however they have flying leads for earth and ignition.

These units do not rely on the switching voltages, instead they are activated when the ignition is on and they charge the auxiliary battery. When the ignition is switched off, the unit will separate and isolate the batteries.

12 Volt 70 Amp Ignition Controlled Relay

Operating voltage	13.4V to 12.6V
Pin configuration	1 + main (starting) battery 2 + auxiliary battery

24 Volt 50 Amp Ignition Controlled Relay

Operating voltage	26.8V to 25.2V
Pin configuration	1 + main (starting) battery 2 + auxiliary battery



BATTERY PROTECTION

Charge Guards

Charge Guard (AVSPC10/20 12/24 V):

Fitting Instructions

- Connect positive (+) from starting battery to pin 1
- Connect positive (+) of auxiliary to auxiliary battery to pin 2
- Connect earth (-) to pin 3

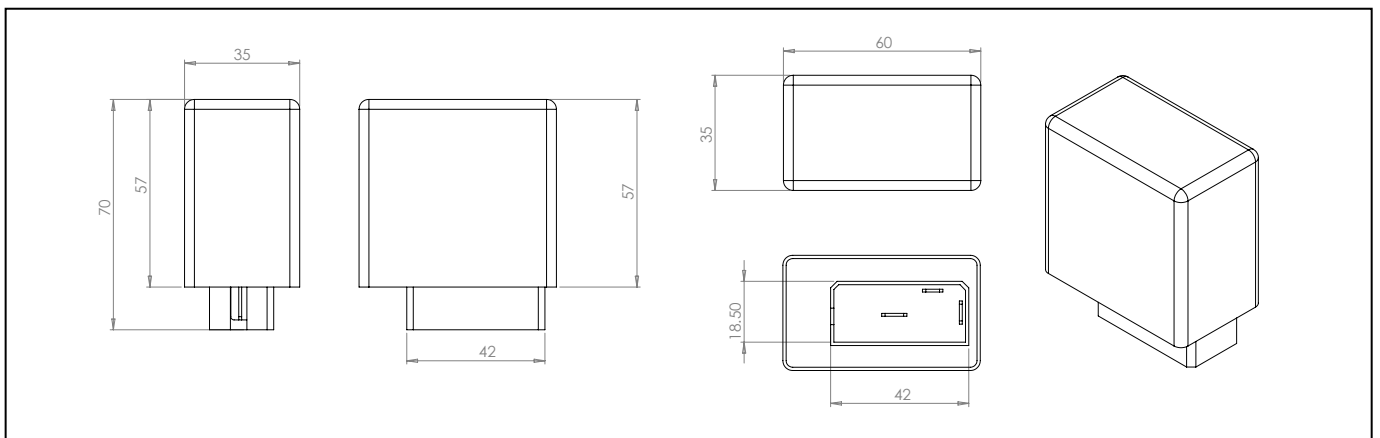
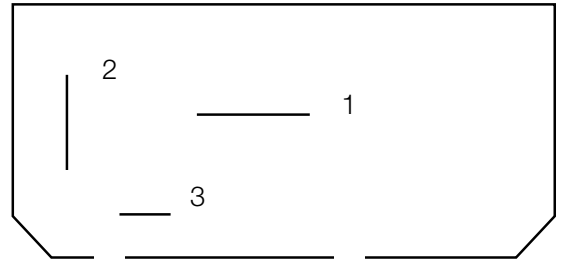
Operation

When the engine is running the device senses the voltage from the alternator and allows the battery to charge the auxiliary battery.

When the voltage to the main battery drops the unit isolates and separates both batteries. This means the starting battery will always have enough power to start and the auxiliary battery will never be able to drain it.

Operational voltages (12V) 13.4 – 12.6V & (24V) 27.0 – 25.4V.

An essential unit especially where “intelligent” alternators are fitted.



Charge Guard (AVSPC11/21 12/24 V):

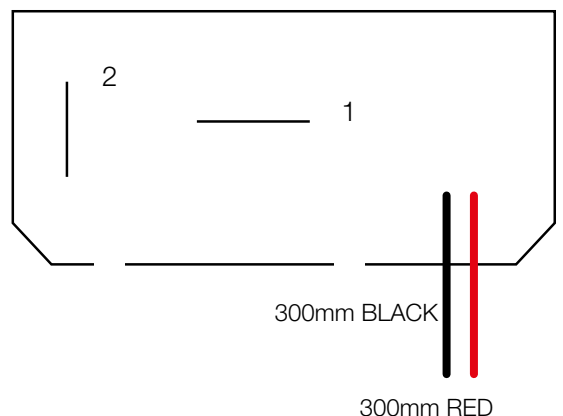
Fitting Instructions

- Connect positive (+) from starting battery to pin 1
- Connect positive (+) of auxiliary to auxiliary battery to pin 2
- Connect earth (-) to black lead
- Connect positive (+) sense to red lead

Operation

When the ignition is on, the unit automatically charges the auxiliary battery.

Operational voltages (12V) 13.4 – 12.6V & (24V) 27.0 – 25.4V.



Problems with flat batteries? Auxiliary equipment draining your starting battery? Fed up with expensive call outs?

Fit CHARGE GUARD and save time and money

Solidstate fully encapsulated electronics

BATTERY PROTECTION

Charge Guards



AVSPC12 12V 200 AMP AVSPC12(2W) 12V 200 AMP
AVSPC24 24V 100 AMP AVSPC24(2W) 24V 100 AMP



How It Works

When the engine is running, the Charge Guard senses the voltage and allows the charge through to the auxiliary battery. When the engine is switched off, the Charge Guard monitors the voltage from the starting battery into the unit. When the voltage drops to 12.5V (AVSPC12) or 25.4V (AVSPC24) the unit will separate and isolate both batteries. This means that equipment powered from auxiliary batteries cannot drain the starting battery.

The unit also has a one minute timer built in to eliminate damaging relay chatter cause by a flat auxiliary battery putting too much strain on the unit.

How It Works

When the ignition is switched on, the unit automatically allows the charging voltage to pass through from the starting battery to the auxiliary battery. This was designed specifically for vehicles with extra equipment that can drain an auxiliary battery quickly.

Technical specification

	AVSPC12	AVSPC24
Rating amps	200 A	100 A
Size	120 x 80 x 70	120 x 80 x 70
Studs size	M8	M8
Quiescent current	> 1 mA	> 1 mA
Switching voltages	13.4V - 12.5V	27.0V - 25.4V

The (2W) versions are exactly the same specification as the normal versions; the red lead is for ignition for constant use.

Why You Need One

With today's engine management systems and "intelligent" alternators you cannot use the charging light on the dash as a switch, also you cannot jump start most new vehicles without the danger of damaging the engine ECU. This unit then becomes cost effective.

Who Uses Them

Emergency vehicles where battery drain is a problem. Utility and council vehicles where multiple beacons/ work lamps or power tools are being charged.



BATTERY PROTECTION

Charge Guards

Charge Guard (AVSPC12/24 12/24 V):

Fitting Instructions

Connect positive from starting battery to unit main terminal
Connect positive of auxiliary to auxiliary terminal
Connect black lead to earth

Operation

When the engine is running the device senses the voltage from the alternator and allows the battery to charge the auxiliary battery.

When the voltage to the main battery drops the unit isolates and separates both batteries. This means the starting battery will always have enough power to start and the auxiliary battery will never be able to drain it.

An essential unit especially where “intelligent” alternators are fitted.

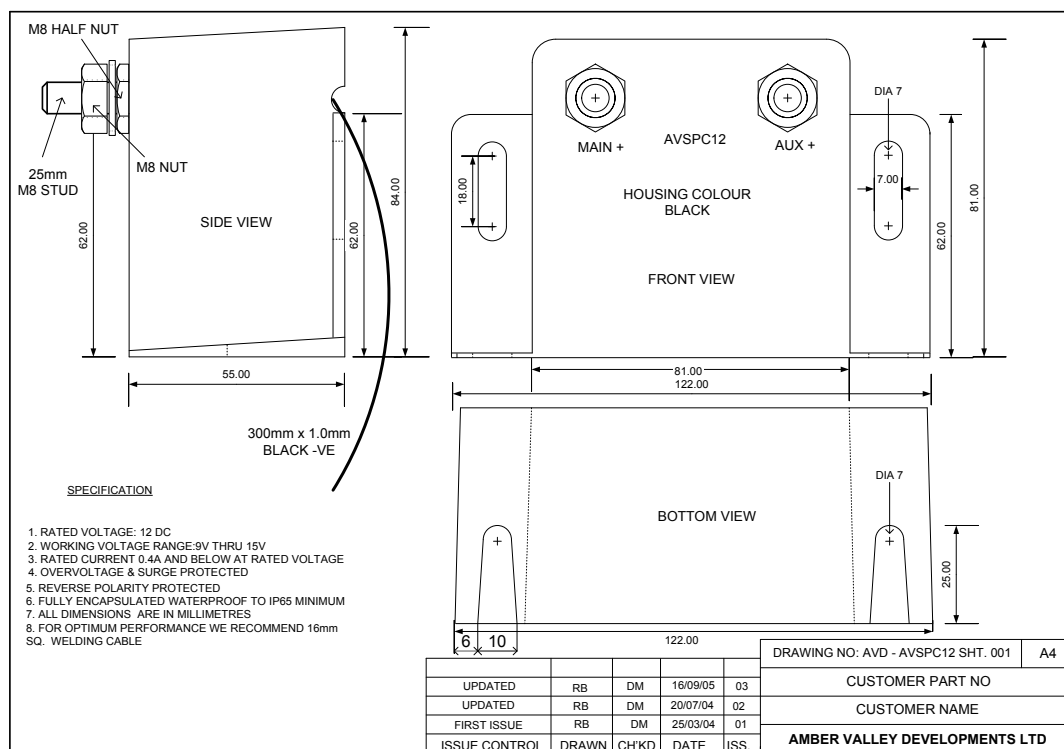
Charge Guard (AVSPC12/24 (2W) 12/24 V):

Fitting Instructions

Connect positive from starting battery to unit main terminal
Connect positive of auxiliary to auxiliary terminal
Connect black lead to earth
Connect red lead to ignition circuit

Operation

When the ignition is on, the unit automatically charges the auxiliary battery.



Problems with flat batteries? Auxiliary equipment draining your starting battery? Fed up with expensive call outs?

Fit CHARGE GUARD and save time and money

Solidstate fully encapsulated electronics

BATTERY PROTECTION

Programmable Charge Guards



NEW

AVSPC12P 12V



AVSPC24P 24V



How It Works

When the engine is running, the Charge Guard senses the voltage and allows the charge through to the auxiliary battery. When the engine is switched off, the Charge Guard monitors the voltage from the starting battery into the unit. When the voltage drops to 12.5V (AVSPC12) or 25.4V (AVSPC24) the unit will separate and isolate both batteries. This means that equipment powered from auxiliary batteries cannot drain the starting battery.

The unit also has a one minute timer built in to eliminate damaging relay chatter caused by a flat auxiliary battery putting too much strain on the unit.

Technical specification

Electrical

- Available in 12 or 24v
- 9 voltage settings
- Green LED to indicate when relay is energised

Mechanical

- M8 Terminals
- M6 Mounting slots
- ABS casing
- Dimensions 122 x 71 x 84

Why You Need One

With today's engine management systems and "intelligent" alternators you cannot use the charging light on the dash as a switch, also you cannot jump start most new vehicles without the danger of damaging the engine ECU. This unit then becomes cost effective.

Who Uses Them

Emergency vehicles where battery drain is a problem. Utility and council vehicles where multiple beacons/ work lamps or power tools are being charged.



BATTERY PROTECTION

Charge Guards

Reprogramming Procedure (AVSPC12P/24P:

To reprogram unit override wire must be connected to MAIN IN prior to power up LED will flash a number of times to indicate current program (default is 6), unit will continue to flash this number of times until override is removed.

Remove override wire and reconnect after a second when the LED has stopped flashing to change program, if override isn't reconnected within 40 seconds the unit will begin running normally with the current program.

After the override wire is reconnected within 40 second window the unit will cycle through program numbers flashing the corresponding number of times with a 1 second break in between it incrementing, ie. flash 6 times for program 6 then 1 second break then flash 7 times for program 7 etc

After the unit flashes the number of times for the desired program remove override, the unit will then flash the corresponding number of times for the program to be set (if incorrect restart) if correct reconnect the override wire, LED on unit will flash a number of times fast to indicate new program is set and saved, restart unit with new set program.

Technical specification

Program Number	Switch off	Delay	Switch on after delay (1S)
1	10V	5S	11.5V
2	11.7V	5S	13.2V
3	10.5V	5S	12V
4	10.5V	5S	12.8V
5	11.25V	5M	13.25V
6 (default)	11.5V	5M	12.8V
7	11.5V	5M	13.8V
8	11.8V	5M	12.8V
9	12.8V	5M	13.2V

BATTERY PROTECTION

Charge Guards



AVSPC400A
12V 400 AMP

This unit is the latest in the range of Charge Guards. It is designed for vehicles where extra equipment is being fitted on upgrade, i.e. ambulances and emergency vehicles.

The AVSPC12 may have been adequate for original fitting but with the addition of upgraded equipment it is putting too much strain on the Charge Guard.

The 400 amp version can cope with virtually all split charging requirements.

It is ideally suited for vehicles such as breakdown vehicles where there is a high requirement for power to run tyre changing machinery.

The relay is a double latching relay which draws zero current in either mode.



Problems with flat batteries? Auxiliary equipment draining your starting battery? Fed up with expensive call outs?

Fit CHARGE GUARD and save time and money

Solidstate fully encapsulated electronics



BATTERY PROTECTION

Charge Guards

Charge Guard (AVSPC400A 12 V):

Fitting Instructions

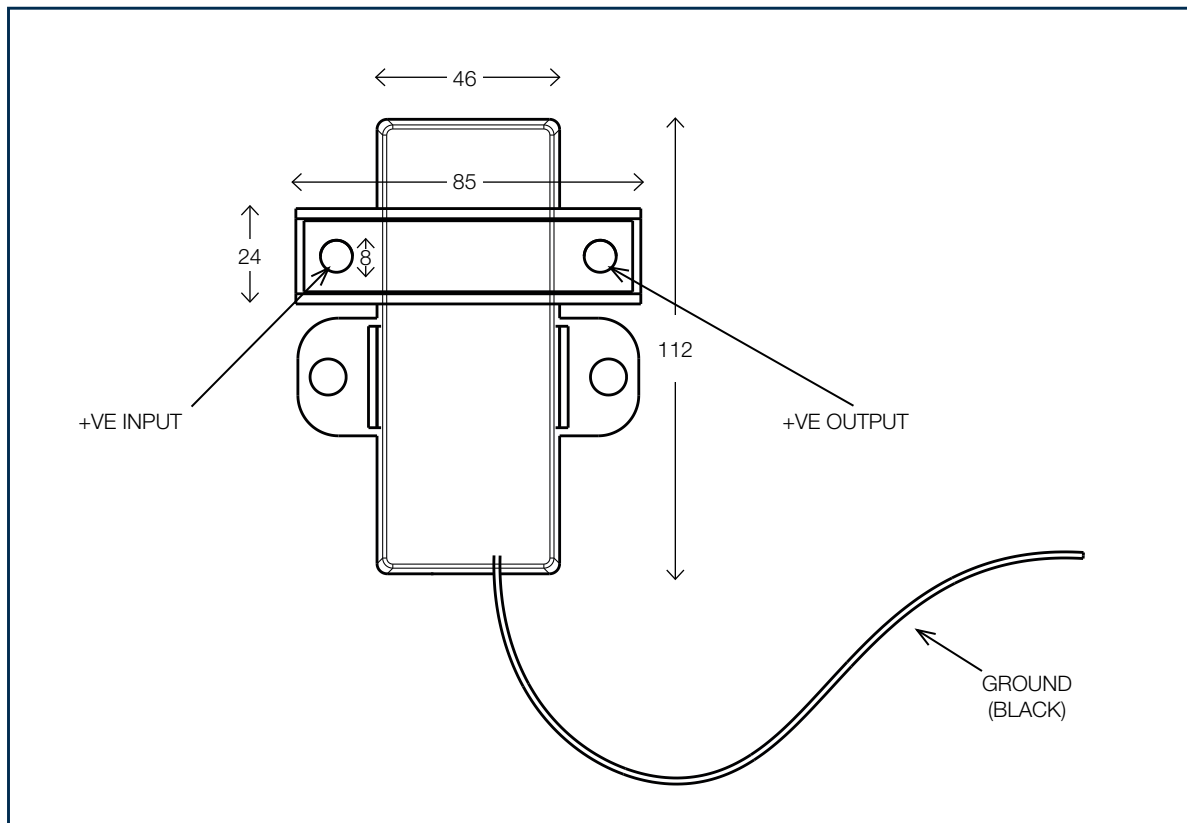
Connect positive from starting battery to unit main terminal
Connect positive of auxiliary to auxiliary terminal
Connect black lead to earth

Operation

When the engine is running the device senses the voltage from the alternator and allows the battery to charge the auxiliary battery.

When the voltage to the main battery drops the unit isolates and separates both batteries. This means the starting battery will always have enough power to start and the auxiliary battery will never be able to drain it.

An essential unit especially where “intelligent” alternators are fitted.



START GUARDS



AVSG12B1 12V

Budget Tail-lift Protector



These units are designed for use with tail-lifts where it is required to simply cut the power to the control panel rather than to the motor. It monitors the voltage and when it reaches 10.8V (AVSG12B1) the built-in buzzer sounds for approximately 10 seconds, then this disconnects the control panel.

It will automatically reconnect when the voltage returns to 13V.

AVSG24B1 24V

Budget Tail-lift Protector

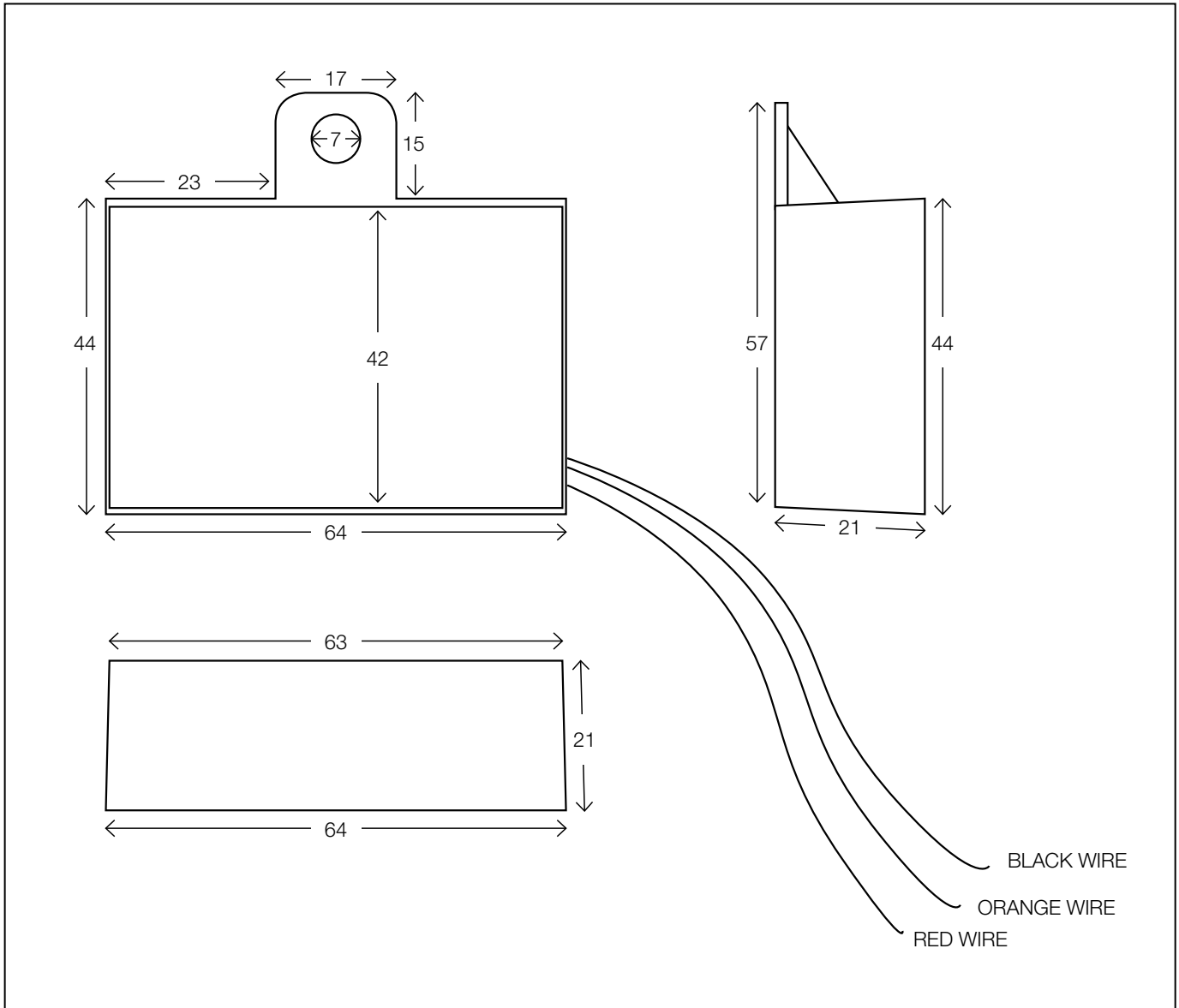


These units are designed for use with tail-lifts where it is required to simply cut the power to the control panel rather than to the motor. It monitors the voltage and when it reaches 21.7V (AVSG24B1) the built-in buzzer sounds for approximately 10 seconds, then this disconnects the control panel.

It will automatically reconnect when the voltage returns to 26V.



START GUARDS



Wiring Instructions

RED to permanent supply

BLACK to Earth

ORANGE to tail lift control power in

START GUARDS



AVSG12SG1 12V

AVSG24SG1 24V



With buzzer

Stop your tail lift from flattening your battery!

The Amber Valley Start Guard gives peace of mind to vehicle fleet operators. It safeguards the voltage in the starting battery by eliminating the possibility of a tail lift, passenger lift or double deck trailer lift, discharging the starting battery to a level where the vehicle is left stranded.

The Start Guard constantly monitors the battery voltage. If the voltage drops below a predetermined level (sufficient to start the engine) the unit will tell the operator by means of a buzzer or a real speech alarm that they must restart the engine. If they do not restart the engine, the unit will cut the power to the tail lift. When the engine is restarted, the power is automatically restored when the battery reaches a predetermined voltage.

- Latest generation battery protection
- Quick and easy to install
- Save costs on vehicle down time and flat batteries
- "Battery low, please start engine" message or buzzer
- Available in 12V and 24V
- Operating temperature -40°C – 120°C
- High peak current capability to 1800A
- Continuous rating to 190A
- Shock resistant to 40G
- Automatic battery monitoring
- Double latching technology
- Solid State Electronics completely encapsulated against water, acid, oil and dust
- OEM specified – 12V and 24V

Technical specification

Part number	Cut off voltage	Restart voltage	Quiescent current	Warning current (max)	Delay to warning	Warning duration	Delay to off from warning	Buzzer	Spoken warning
AVSG12SG1	11.7V	13.0V	3.0mA	2.5A	1 min	7 secs	55 secs	✓	
AVSG24SG1	23.5V	26.0V	3.0mA	2.5A	1 min	7 secs	55 secs	✓	



START GUARDS

Battery Guard Information

For situations and applications where low voltage abuse is a risk, an Amber Valley battery guard system can be mounted in-line on the power cable from the battery to the supply of the lift. This device constantly monitors the battery voltage.

- If the voltage drops below 23.1V, the unit will tell the operator by means of an audible warning buzzer that the engine must be re-started.
- If the operator doesn't re-start the engine, the unit will cut off the power to the tail lift after 30 sec.
- Once the vehicle has been restarted, and the input voltage exceeds 26.0V, the unit will re-set and the tail lift can be used again.

The battery guard

- Is quick and easy to install
- Saves cost on vehicle down time, flat batteries, and component failure on the tail lift caused by this abuse
- Is available in 12V and 24V
- Operates at -40°C to 120°C
- Has a peak current capability of 1800A, and a continuous rating of 190A
- Is completely encapsulated against water, acid, oil and dust.

Fitting Instructions

Locate the main +ve cable supplying power to the tail lift. Mount the battery guard in a suitable location, close to the power cable (see note 1).

Cut the power lead and terminate both ends with a suitable ring terminal.

Connect the power cable from the battery to the "+ve in" connector on the battery guard.

Then connect the power cable feeding the tail lift to the "+ve out" connector.

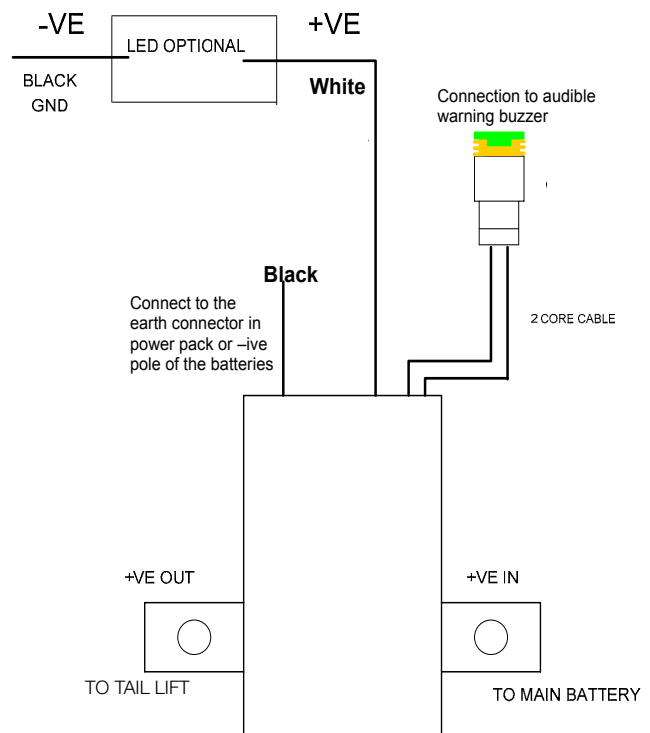
Connect the black lead to a good earth point in the power pack.

Connect the white wire to the +ve side of a led (if visual warning is being used).

Connect the audible warning unit.

If this unit is fitted externally, Amber Valley recommends the fitting of rubber boots over the connections to this unit, along with a protective grease (both not supplied).

Consideration must be given, when externally mounting this device, to the location & possibly the provision of a suitable enclosure to minimise water ingress or environmental damage.



START GUARDS



AVSG12SG2 12V

AVSG24SG2 24V

Stop your tail lift from flattening your battery!



With
speech
alarm

The Amber Valley Start Guard gives peace of mind to vehicle fleet operators. It safeguards the voltage in the starting battery by eliminating the possibility of a tail lift, passenger lift or double deck trailer lift, discharging the starting battery to a level where the vehicle is left stranded.

The Start Guard constantly monitors the battery voltage. If the voltage drops below a predetermined level (sufficient to start the engine) the unit will tell the operator by means of a buzzer or a real speech alarm that they must restart the engine. If they do not restart the engine, the unit will cut the power to the tail lift. When the engine is restarted, the power is automatically restored when the battery reaches a predetermined voltage.

- Latest generation battery protection
- Quick and easy to install
- Save costs on vehicle down time and flat batteries
- “Battery low, please start engine” message or buzzer
- Available in 12V and 24V
- Operating temperature -40°C – 120°C
- High peak current capability to 1800A
- Continuous rating to 190A
- Shock resistant to 40G
- Automatic battery monitoring
- Double latching technology
- Solid State Electronics completely encapsulated against water, acid, oil and dust
- OEM specified – 12V and 24V

Technical specification

Part number	Cut off voltage	Restart voltage	Quiescent current	Warning current (max)	Delay to warning	Warning duration	Delay to off from warning	Buzzer	Spoken warning
AVSG12SG2	11.7V	13.0V	3.0mA	2.5A	1 min	7 secs	55 secs		✓
AVSG24SG2	23.5V	26.0V	3.0mA	2.5A	1 min	7 secs	55 secs		✓



START GUARDS

Battery Guard Information

For situations and applications where low voltage abuse is a risk, an Amber Valley battery guard system can be mounted in-line on the power cable from the battery to the supply of the lift. This device constantly monitors the battery voltage.

- If the voltage drops below 23.1V, the unit will tell the operator by means of an audible warning buzzer that the engine must be re-started.
- If the operator doesn't re-start the engine, the unit will cut off the power to the tail lift after 30 sec.
- Once the vehicle has been restarted, and the input voltage exceeds 26.0V, the unit will re-set and the tail lift can be used again.

The battery guard

- Is quick and easy to install
- Saves cost on vehicle down time, flat batteries, and component failure on the tail lift caused by this abuse
- Is available in 12V and 24V
- Operates at -40°C to 120°C
- Has a peak current capability of 1800A, and a continuous rating of 190A
- Is completely encapsulated against water, acid, oil and dust.

Fitting Instructions

Locate the main +ve cable supplying power to the tail lift. Mount the battery guard in a suitable location, close to the power cable (see note 1).

Cut the power lead and terminate both ends with a suitable ring terminal.

Connect the power cable from the battery to the "+ve in" connector on the battery guard.

Then connect the power cable feeding the tail lift to the "+ve out" connector.

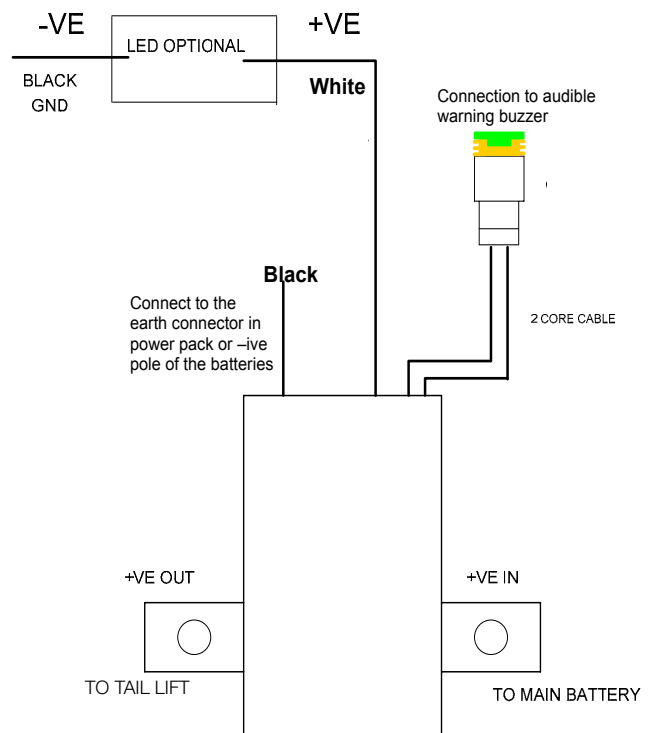
Connect the black lead to a good earth point in the power pack.

Connect the white wire to the +ve side of a led (if visual warning is being used).

Connect the audible warning unit.

If this unit is fitted externally, Amber Valley recommends the fitting of rubber boots over the connections to this unit, along with a protective grease (both not supplied).

Consideration must be given, when externally mounting this device, to the location & possibly the provision of a suitable enclosure to minimise water ingress or environmental damage.



POWER PROTECTORS



AVPP12VR 12V

AVPP24VR 24V

With buzzer



Battery Protection

The Amber Valley Power Protectors are the latest generation of battery protection. The Power Protector constantly monitors the battery voltage and warns if it drops below a predetermined level. If the vehicle's ignition is on, the Power Protector will constantly warn the driver without automatically disconnecting all circuits passed through it. If the ignition is off, the Power Protector will automatically disconnect all circuits passed through it after one minute from the warning.

- Latest generation battery protection
- Quick and easy to install
- Remote isolation feature as standard
- Available in 12V and 24V
- Can Bus and Multiplex compliant
- Operating temperature -40°C - 120°C
- High peak current capability to 1800A
- Continuous rating to 190A
- Negative & Positive inhibits
- Shock resistant to 40G
- Automatic battery monitoring
- Double latching technology
- Override bleed facility
- Solid State Electronics completely encapsulated against water, acid, oil and dust
- OEM Specification

Wire	Action
White	Switch LED positive terminal
Blue	Switch terminal no. 2
Green	Switch terminal no. 8
Red	Inhibit positive
Orange	Inhibit Negative
Black	Ground
Twin Cable Red	Audible alarm positive
Twin Cable Black	Audible alarm negative
LED Negative	Switch terminal no. 4 and ground

Technical specification

Part Number	Cut off voltage	Quiescent current	Warning current (max)	Delay to warning	Warning duration	Delay to off from warning	Buzzer	Spoken warning	Remote isolation
AVPP12VR	12V	1.2mA	3A	2 min 10 secs	7 secs	1 min 5 Secs	✓		✓
AVPP24VR	24V	1.2mA	3A	2 min 10 secs	7 secs	1 min 5 Secs	✓		✓



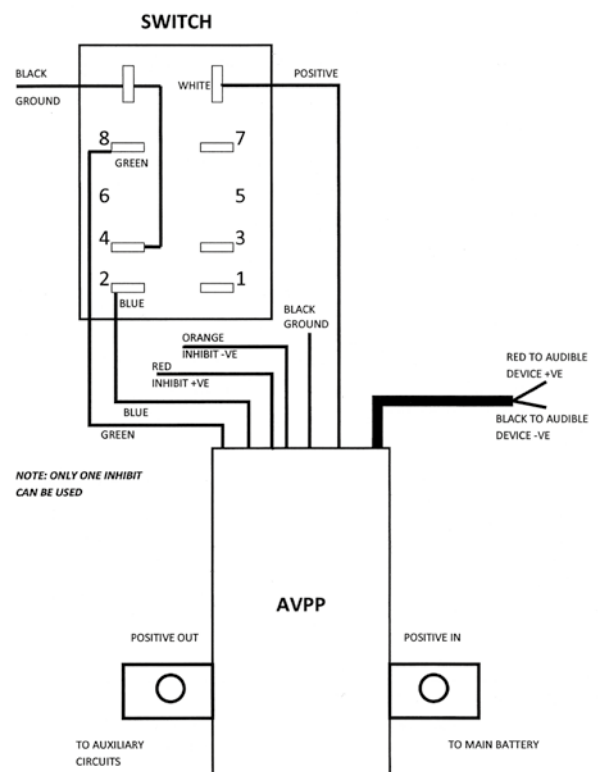
POWER PROTECTORS

Wiring and Fitting Instructions (AVPP12VR and AVPP24VR):

1. Install Power Protector as per the wiring diagram & instructions.
2. To engage the system, push the symbol side of the 2 way switch. This will illuminate the switch symbol to show that the system is working.
3. When the voltage in the vehicle battery drops to a predetermined level (12v = 12.0v, 24v = 24.0v) the power protector will send out a warning (buzzer or talker alarm).
4. If the Power Protector is not utilising either of the inhibit features it will disconnect all circuits passed through it after approximately 1 minute from the warning.
5. If the positive inhibit is being used through the vehicle ignition switch the Power Protector will not disconnect any of the circuits passed through it should the ignition be on. Instead the Power Protector will warn the driver repeatedly until the driver rectifies the problem. If the ignition switch is not in any of the on positions, the Power Protector will disconnect after approximately 1 minute from the warning.
6. If the negative inhibit is being used through the vehicle oil pressure switch, the Power Protector will not disconnect any of the circuits passed through it should the vehicle engine be running. Instead the Power Protector will warn the driver repeatedly until the driver rectifies the problem. If the engine is not running, the Power Protector will disconnect after approximately 1 minute from the warning.
7. **NOTE: You can only use either the positive or the negative inhibit – not both. To avoid confusion when fitting, remove / snip off the unused inhibit wire(s).**
8. To manually disconnect the circuits passed through the Power Protector click the non symbol side of the switch (switch symbol will not be illuminated).
9. If you do not want a manual disconnect function, do not connect the green wire to terminal 8 on the switch.
10. Should there be a drain on the vehicle battery and the Power Protector has disconnected all circuits passed through itself, to reconnect the system click the symbol side of the switch (switch symbol will be illuminated).

Connect all positive auxiliary circuits (except main cranking circuit) through the power protector. The black lead must be connected to a good earth or the negative battery terminal. Should any circuit be required constantly then the power protector can be bypassed by taking a feed from the auxiliary (in) terminal to the relevant terminal on the fuse box.

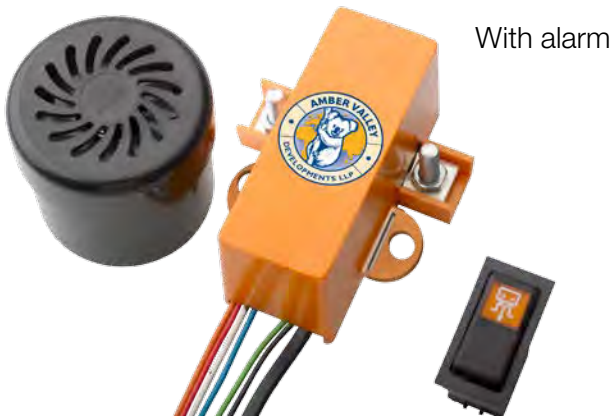
Exterior fitment – If you wish to mount the unit on the exterior of a vehicle you will need to fit suitable rubber boots (not included with the kit) on the metal studs as well as greasing around the stud to cover the visible bare metal.



POWER PROTECTORS



AVPP12VR15C 12V
AVPP24VR15C 24V



Battery Protection

The Amber Valley Power Protectors are the latest generation of battery protection. The Power Protector constantly monitors the battery voltage and warns if it drops below a predetermined level. If the vehicle's ignition is on, the Power Protector will constantly warn the driver without automatically disconnecting all circuits passed through it. If the ignition is off, the Power Protector will automatically disconnect all circuits passed through it after one minute from the warning.

- Latest generation battery protection
- Quick and easy to install
- Remote isolation feature as standard
- Available in 12V and 24V
- Can Bus and Multiplex compliant
- Operating temperature -40°C - 120°C
- High peak current capability to 1800A
- Continuous rating to 190A
- Negative & Positive inhibits
- Shock resistant to 40G
- Automatic battery monitoring
- Double latching technology
- Override bleed facility
- Solid State Electronics completely encapsulated against water, acid, oil and dust
- OEM Specification

Wire	Action
White	Switch LED positive terminal
Blue	Switch terminal no. 2
Green	Switch terminal no. 8
Red	Inhibit positive
Orange	Inhibit Negative
Black	Ground
Twin Cable Red	Audible alarm positive
Twin Cable Black	Audible alarm negative
LED Negative	Switch terminal no. 4 and ground

Technical specification

Part Number	Cut off voltage	Quiescent current	Warning current (max)	Delay to warning	Warning duration	Delay to off from warning	Buzzer	Spoken warning	Remote isolation
AVPP12VR15C	12V	1.2mA	3A	2 min 10 secs	7 secs	1 min 5 Secs		✓	✓
AVPP24VR15C	24V	1.2mA	3A	2 min 10 secs	7 secs	1 min 5 Secs		✓	✓



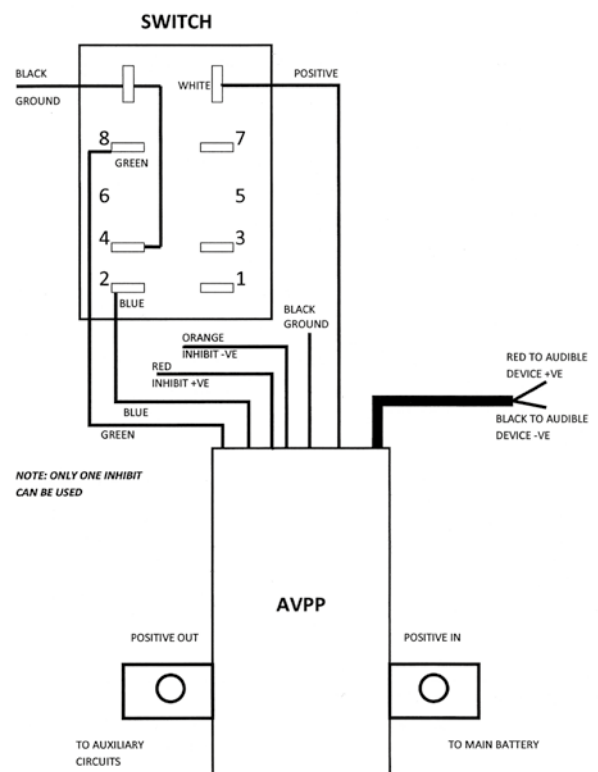
POWER PROTECTORS

Wiring and Fitting Instructions (AVPP12VR and AVPP24VR):

1. Install Power Protector as per the wiring diagram & instructions.
2. To engage the system, push the symbol side of the 2 way switch. This will illuminate the switch symbol to show that the system is working.
3. When the voltage in the vehicle battery drops to a predetermined level (12v = 12.0v, 24v = 24.0v) the power protector will send out a warning (buzzer or talker alarm).
4. If the Power Protector is not utilising either of the inhibit features it will disconnect all circuits passed through it after approximately 1 minute from the warning.
5. If the positive inhibit is being used through the vehicle ignition switch the Power Protector will not disconnect any of the circuits passed through it should the ignition be on. Instead the Power Protector will warn the driver repeatedly until the driver rectifies the problem. If the ignition switch is not in any of the on positions, the Power Protector will disconnect after approximately 1 minute from the warning.
6. If the negative inhibit is being used through the vehicle oil pressure switch, the Power Protector will not disconnect any of the circuits passed through it should the vehicle engine be running. Instead the Power Protector will warn the driver repeatedly until the driver rectifies the problem. If the engine is not running, the Power Protector will disconnect after approximately 1 minute from the warning.
7. **NOTE: You can only use either the positive or the negative inhibit – not both. To avoid confusion when fitting, remove / snip off the unused inhibit wire(s).**
8. To manually disconnect the circuits passed through the Power Protector click the non symbol side of the switch (switch symbol will not be illuminated).
9. If you do not want a manual disconnect function, do not connect the green wire to terminal 8 on the switch.
10. Should there be a drain on the vehicle battery and the Power Protector has disconnected all circuits passed through itself, to reconnect the system click the symbol side of the switch (switch symbol will be illuminated).

Connect all positive auxiliary circuits (except main cranking circuit) through the power protector. The black lead must be connected to a good earth or the negative battery terminal. Should any circuit be required constantly then the power protector can be bypassed by taking a feed from the auxiliary (in) terminal to the relevant terminal on the fuse box.

Exterior fitment – If you wish to mount the unit on the exterior of a vehicle you will need to fit suitable rubber boots (not included with the kit) on the metal studs as well as greasing around the stud to cover the visible bare metal.



RUN LOCK SYSTEMS



AVDM001 12V

Driver's Mate



This is the first in a series of exciting new products to make the drivers and operators life easier and save time and money. This unit will allow the engine to keep running while the key is removed from the ignition, thereby ensuring there is sufficient power to use Beacons, Accessories, Tail Lifts etc. without danger of battery discharge. On re-entering the cab the key must be re-inserted. If not and the handbrake, footbrake or clutch is operated the engine will cut out immediately.

AVDM002 24V

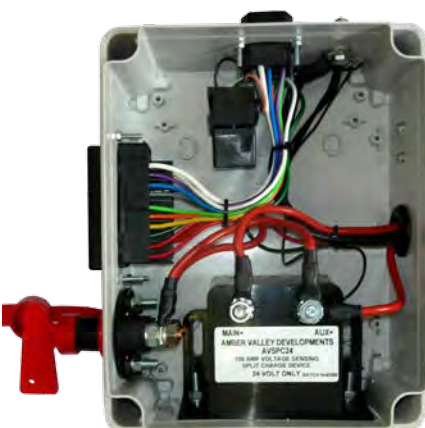
- 3 circuit monitoring
- Momentary dash mounted switch to activate the unit
- Solid state encapsulated electronics to protect against dust and moisture
- Microprocessor controlled
- Self adjusted to individual vehicle

When fitted simply connect all circuits. Start engine and with handbrake on and the clutch and footbrake in the normal off position. Press the red button on the unit, the microprocessor in the unit reads and records the vehicle settings and registers them as the norm. When activated, if these settings change the unit cuts the engine off.

AVPC12 12V

AVPC24 24V

Power Control Systems



Multi function pre-wired. Power centre aimed at new builds and conversions. Includes volt sensing, split charge, master cut-off switch, through wall multi blade fuse holder and loom plug socket. We can adapt or re-design for specific applications – will save hours of installation time.



RUN LOCK SYSTEMS

Fitting Instructions for AVDM001 and AVDM002

Keyless Running System

Wiring Instructions:

1. Red wire to positive feed
2. Black wire to Earth
3. White wires (2) to Activating dash mounted switch
4. Blue wires to Handbrake switch, footbrake switch, and clutch pedal switch.

Wiring the Relays

NO = Normally Open

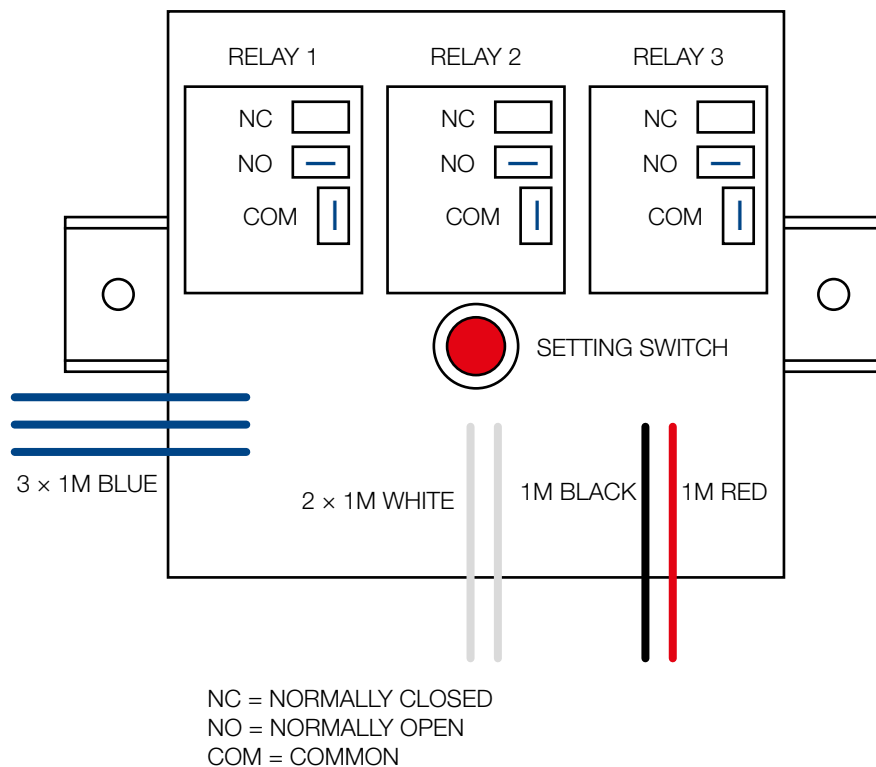
COM = COMMON

Connect common terminal to battery + input to ignition switch. The common terminals on the relays can be linked to save excess wiring.

Connect NO terminal the 1st relay to the position lead (Auxiliary) circuit on ignition switch.

Connect NO terminal on 2nd relay to Position 2 lead (RUN) circuit on Ignition Switch.

All relays are activated at the same time therefore it does not matter which relay is connected to which circuit.



SECTION 7

CABLE MANAGEMENT



TOWING & TRAILER	1
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TOWING & TRAILER

Trailer Wiring Systems

TRAILER JUNCTION BOXES

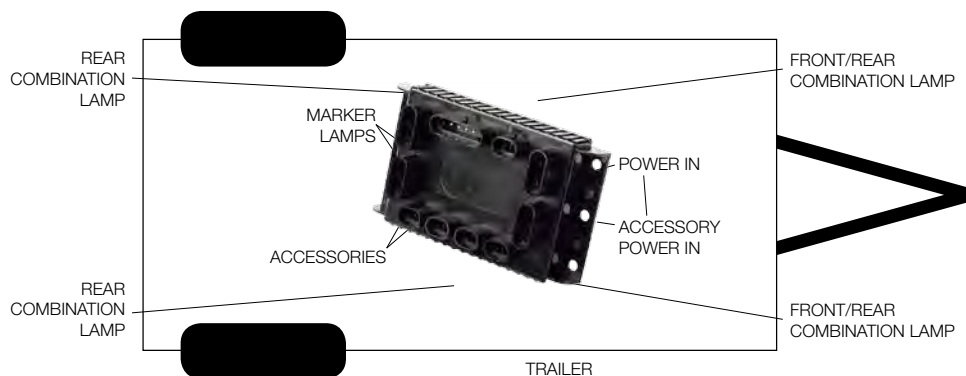
These devices are specifically designed to make electrical installation of lights and accessories to trailers to be a simple operation not requiring skilled electricians as the units are designed to be simple to fit and are fully function tested to give peace of mind. There are two versions:

AVJB01

This is a simple version where the seven core cable is connected to the main plug, the blue lead is not used and a six-way superseal is fitted. The two output circuits are four-way superseal to go to the stop tail and indicator circuits on each side of the trailer. This can be provided as a complete kit if necessary.

AVJB02

This is the complete system. It has an additional input circuit that can come directly from a switch on the towing vehicle. There are two sets of four-way connectors one can be used for front lights/indicators if fitted or alternatively both can be used if two sets of lights are fitted to a trailer. There are four x two-way female superseal connectors, two of which are powered from the tail circuit in the four-way connector allowing the connection of marker lights. The other two are powered directly from the two-way male superseal connector. This is powered via the blue wire in the seven-core cable (**PIN 2**) and is usually used for accessories that can be switched on by the towing vehicle, ie. work lamps or warning beacons, when powered it sends power to both female connectors. This is also available as a complete system.



Universal Bypass Relay

Fog light function – to activate fog lights on attached trailer – turn fog lights on, then immediately off. Fog lights will now **ONLY** be illuminated on trailer. As a reminder, a warning buzzer will activate every 90 seconds in the vehicle. To cancel this function – turn side lights off.

For vehicles with combined brake and tail light you have to discard (not connect) the black and brown wire on the bypass relay (input side only) and connect the single wire on the vehicle to the red wire on bypass relay.

★★★ PLUGS MUST BE FITTED AS ILLUSTRATED ★★★

Vehicle side of relay

Left Hand Indicator
Right Hand Indicator
Left Hand Tail Light
Right Hand Tail Light
Brake Lights
Fog Light(s)
Reverse Lights
12V DC
Earth



Towing socket side of relay

Left Hand Indicator/Yellow
Right Hand Indicator/Green
Left Hand Tail Light/Black
Right Hand Tail Light/Brown
Brake Lights/Red
Fog Light(s)/Blue
Reverse Lights (Yellow from 12s cable **IF FITTED**)
T.T. TERMINATOR (not used)*
White wire from 12N socket to Earth

* only to be used when fitting an additional warning light or buzzer

SMALL TRAILER



Complete Wiring System Plug & Play Solutions AVJB01KIT



- Fully waterproof
- Fully tested
- Easy fit no electrical experience required
- Using industry standard super-seal connectors which are over moulded for added protection

Kit Comprises Of:

- 1 x Pair LED stop tail & indicator lights, complete with 4 metres of 4 core cable
- 1 x 7.5 metres of core cable with 7 pin 12V plug fitted to one end and 6 way super-seal plug to the other
- 1 x Fully waterproof and potted electrical control unit (ECU)
- 1 x Mounting box for ECU and 12 cable ties

Full Connectivity Suitable For Any Light AVTL014M

This kit comes with “Hamburger” LED lights but for OEM requirement we can use any light with any cable length.



High Powered LED Suitable As Beacon AV3LEDA



ECU AVJB01

The ECU is specifically designed to make connecting the system simple.

- IN** Main Power Lead
- R1** Right Hand Lights
- L1** Left Hand Lights





MODULAR AGRICULTURAL TRAILER

Equipment Wiring System Completely Encapsulated AVJB02KIT



Kit Comprises Of:

- 1 x Pair LED stop tail & indicator lights, complete with super-seal connectors
- 1 x 10 metre 7 core cable with 7 pin plug on one end and 1 x 6 way, 1 x 2 way super-seal connectors on the other end
- 1 x Fully waterproof ECU complete with bangs for unused connectors

There are spare connectors for front lights, side marker lights and accessory lights, beacons , work lands etc.

Full Connectivity Suitable For Any Light AVTL014M

This kit comes with “Hameburger” LED lights but for OEM requirement we can use any light with any cable length.



ECU AVJB02

Outputs for:

- Front light cluster.
- Rear light cluster.
- Side marker lights.
- Accessories for beacons, work lamps.
- Separate input for accessories.



High Powered LED Suitable As Beacon AV3LEDA



CABLE MANAGEMENT



Junction Box Blanking Plugs

For sealing unused ports on our junction boxes. Lock into place securely. Glue filled. Heat shrink over cable entry to stop moisture from entering into junction box.

Blanking Plugs

SS 2B	2 Way Superseal Blanking Plug
SS 3B	3 Way Superseal Blanking Plug
SS 4B	4 Way Superseal Blanking Plug
SS 5B	5 Way Superseal Blanking Plug
SS 6B	6 Way Superseal Blanking Plug





CABLE MANAGEMENT

Ideal for jointing cables. Uses superseal connectors. 100% reliable solution to cable management.



JB4

2 x 2 x 2 x 2 Way Junction Box

- Waterproof and potted to withstand vibration



JB5

3 x 3 x 3 x 3 Way Junction Box

- Waterproof and potted to withstand vibration



JB6

4 x 4 x 4 x 4 Way Junction Box

- Waterproof and potted to withstand vibration



JB7

5 x 3 x 5 x 3 Way Junction Box

- Allows 5 way in and out and splits to lefthand and righthand
- Ideal for indicator side markers combination.
- Ideal for daisy chaining of lights
- Eliminates the need for splicing
- Fully Tested and potted

CABLE MANAGEMENT



Ideal for jointing cables. Uses superseal connectors. 100% reliable solution to cable management.



JB8

**5 x 4 x 5 x 4 Way
Junction Box**

- Allows 5 way in and out and splits to lefthand and righthand
- 4 way connection is ideal for stop, tail and indicator.
- Ideal for daisy chaining of lights
- Eliminates the need for splicing
- Fully Tested and potted



JB9

**6 x 4 x 6 x 4 Way
Junction Box**

- Allows 6 way in and out and splits to lefthand and righthand
- 4 way connection is ideal for stop, tail and indicator.
- Ideal for daisy chaining of lights
- Eliminates the need for splicing
- Fully Tested and potted



JB10

- Ideally suited for Trailers where Power In can be distributed to Rear Lights, Side Markers and Auxiliary Circuits



JB11

**6 x 6 x 6 x 6 Way
Junction Box**

- Waterproof and potted to withstand vibration



JB12

- Ideally suited for trailers where Power In can be distributed to Rear Lights, Side Markers and Auxiliary Circuits but incorporates a 6-way connection for double trailers or accessories



OVERMOULDING

Our Connectors are now overmoulded as it uses plant based environmentally friendly overmoulding material



AVSPL1F2M

One Way Female to two Male Superseal Splices



AVSPL1M2F

One Way Male to two Female Superseal Splices

ANDERSON CONNECTORS

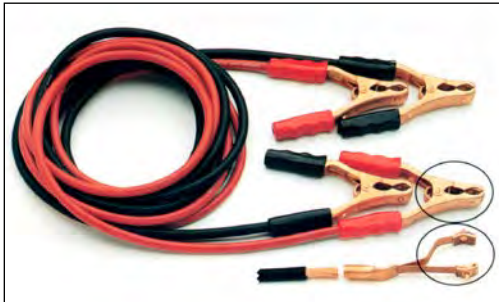


AVAND01	50A	GREY CONNECTOR
AVAND02	175A	GREY CONNECTOR
AVAND03	350A	GREY CONNECTOR
AVAND04	50A	RED CONNECTOR
AVAND05	175A	RED CONNECTOR
AVAND06	350A	RED CONNECTOR
AVAND07	POLYCARB HANDLE FOR 175A	
AVAND08	POLYCARB HANDLE FOR 350A	



JUMP LEADS

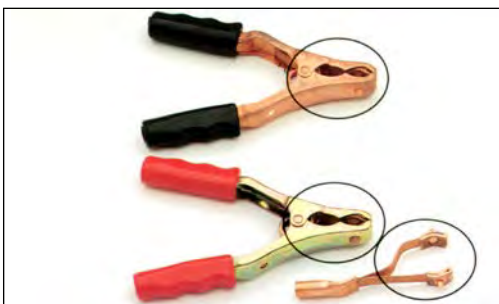
AVJL3 5M 250A
JUMP LEADS



AVJL2 5M CROC CLIPS 175A
& ANDERSON CONNECTOR



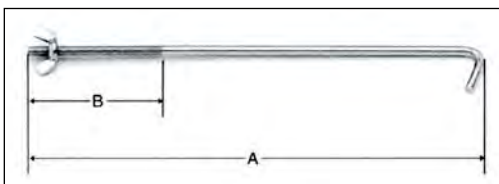
CROCODILE CLIPS PAIRS



AVCC01	40A
AVCC02	60A
AVCC03	90A
AVCC04	120A
AVCC05	150A
AVCC06	180A
AVCC07	300A

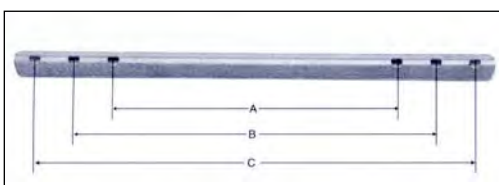


BATTERY RETAINERS



AVBR240
A = 240

AVBR290
A = 290
B = 70



AVBR300
A = 230
B = 295
C = 355



AVBC02



AVBC01



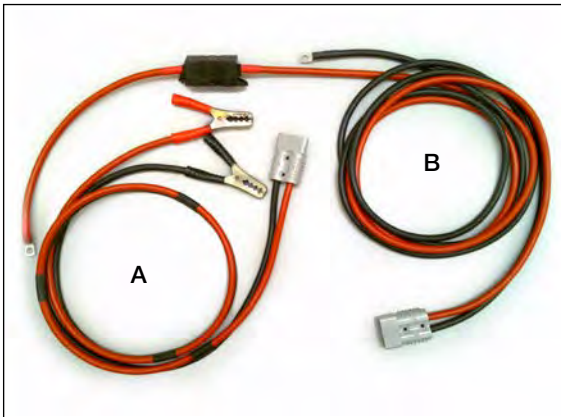
SPECIAL JUMP LEADS



AVJL01 3 METER 16MM SQ. CABLE

AVJL02 3 METER 35MM SQ. CABLE

For vehicle to vehicle jump starting. Eliminating the possibility of polarity mistakes – safer to use than crocodile clips.

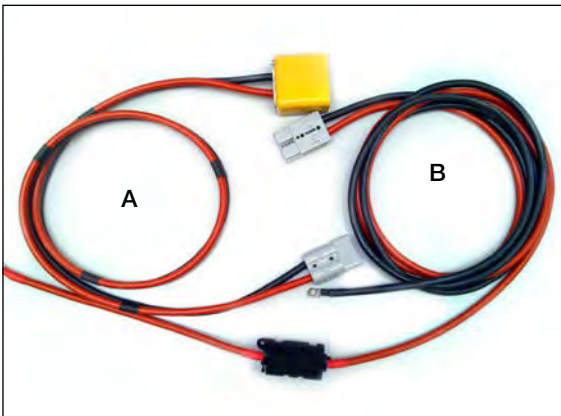


AVABB03 FUSED JUMP LEADS

Dimension A: 2 Meters long

Dimension B: to suit individual vehicles, please specify length on ordering and amperage of mega fuse.

FUSED JUMP LEADS ideally suited to service vehicles. Put the crocodile clips on to battery first then connect Anderson Connectors to eliminate costly mistakes.



AVABB02 TAIL LIFT LEAD SET

35mm Sq. Cable

Dimension A: 2 Meters long

Dimension B: to suit individual vehicles, please specify length on ordering and amperage of mega fuse.

Tail lift lead set used when tractor unit batteries power the tail lift on the trailer, fused with Mega fuse and fitted with Anderson Connectors to eliminate the possibility of damage if driver fails to disconnect when uncoupling trailer.

AVABB04 TAIL LIFT LEAD SET

Same as AVABB02 but 3 Anderson Connectors



AVSG12G2SPEC 12V

AVSG24G2SPEC 24V

This is a tail lift protector with a bespoke harness which is fused. It is designed to blow the fuse in the event of a power surge coming from the tail lift motor, thereby protecting the vehicle ECU from serious damage.

Also available in 12V. The unit can be manufactured to suit individual or fleet requirements.

BATTERY TERMINALS PKT-10



AVBT001N
Screw Fix Battery Terminal
(Car Type) (40mm)

AVBT001P
Screw Fix Battery Terminal
(Car Type) (40mm)

AVBT002N
Screw Fix Battery Terminal
(Commercial Type 60mm)

AVBT002P
Screw Fix Battery Terminal
(Commercial Type 60mm)

AVBT007N
Screw Fix Battery Terminal
(Commercial Type 70mm)

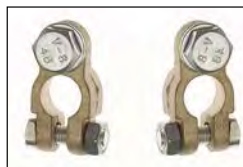
AVBT007P
Screw Fix Battery Terminal
(Commercial Type 70mm)



AVBT004N
Wing Nut Battery
Terminal
AVBT004P
Wing Nut Battery
Terminal



AVBT006N
Battery Terminal
AVBT006P
Battery Terminal



AVBT003N
Screw Fix
Battery Terminal
AVBT003P
Screw Fix
Battery Terminal



AVBT005N
Quick Release
Battery Terminal
AVBT005P
Quick Release
Battery Terminal



AVBTC01N
AVBTC01P



AVBTC02N
AVBTC02P

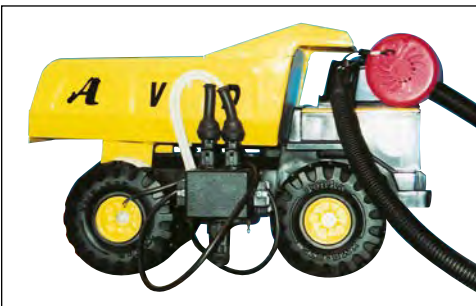


AVBTC03N
AVBTC03P



AVBTC04

POWER POST



AVPP12VR

Power Post is designed for plant applications where batteries are difficult to reach.

The unit comes with 1 metre H/D Starter Cable 63mm SQ 133 Strands - 20° to 80° (2V0 SAEJ1127) for connection to positive circuit, which feeds into the housing to a stainless steel stud. This provides a positive power supply to attach work lamps or jump lead. The negative supply is taken from the chassis. This saves labour cost because of ease of access and damage to vehicles by tow\push starting.

- Operating temperature -40°C to 120°C
- High peak current capability to 1800A

Other cable lengths available on request.



Suitable for:

Trucks, coaches, buses and construction equipment



Technical specification

Rated Amps	Size (WxHxD)	Quiescent Current	Switching Voltages
100 A	122x84x73	<1mA	27.0V - 25.4V

COPPER TUBE TERMINALS PKT-10



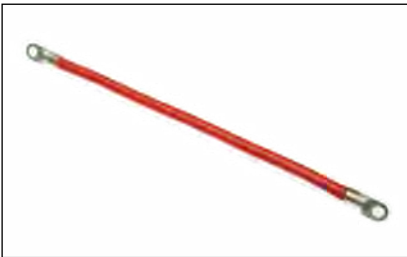
CABLE SIZE	STUD SIZE					
	5mm	6mm	8mm	10mm	12mm	14mm
10mm SQ	AVTU105	AVTU106	AVTU108	AVTU1010	AVTU1012	
16mm SQ		AVTU166	AVTU168	AVTU1610	AVTU1612	
25mm SQ		AVTU256	AVTU258	AVTU2510	AVTU2512	
35mm SQ		AVTU356	AVTU358	AVTU3510	AVTU3512	
50mm SQ		AVTU506	AVTU508	AVTU5010	AVTU5012	AVTU5014
70mm SQ				AVTU7010	AVTU7012	AVTU7014



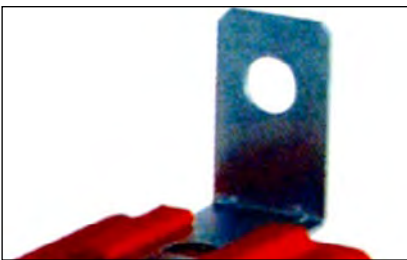
BATTERY LEADS



AVBL001	150MM	25MM SQ	BATTERY TO BATTERY LEAD
AVBL002	230MM	25MM SQ	BATTERY TO BATTERY LEAD
AVBL003	310MM	25MM SQ	BATTERY TO BATTERY LEAD
AVBL004	150MM	35MM SQ	BATTERY TO BATTERY LEAD
AVBL005	230MM	35MM SQ	BATTERY TO BATTERY LEAD
AVBL006	310MM	35MM SQ	BATTERY TO BATTERY LEAD



AVBL007	230MM	25MM SQ	BATTERY TO BATTERY LEAD
AVBL008	300MM	25MM SQ	BATTERY TO BATTERY LEAD
AVBL009	450MM	25MM SQ	BATTERY TO BATTERY LEAD
AVBL010	230MM	35MM SQ	BATTERY TO BATTERY LEAD
AVBL011	300MM	35MM SQ	BATTERY TO BATTERY LEAD
AVBL012	450MM	35MM SQ	BATTERY TO BATTERY LEAD



AVBL013	230MM	25MM SQ	BATTERY TO BATTERY LEAD
AVBL014	300MM	25MM SQ	BATTERY TO BATTERY LEAD
AVBL015	450MM	25MM SQ	BATTERY TO BATTERY LEAD
AVBL016	230MM	35MM SQ	BATTERY TO BATTERY LEAD
AVBL017	300MM	35MM SQ	BATTERY TO BATTERY LEAD
AVBL018	450MM	35MM SQ	BATTERY TO BATTERY LEAD



AVBL019	150MM	19MM SQ	BRAIDED CABLE 8MM TERMINAL
AVBL020	230MM	19MM SQ	BRAIDED CABLE 8MM TERMINAL
AVBL021	310MM	19MM SQ	BRAIDED CABLE 8MM TERMINAL
AVBL022	380MM	19MM SQ	BRAIDED CABLE 8MM TERMINAL
AVBL023	450MM	19MM SQ	BRAIDED CABLE 8MM TERMINAL
AVBL024	550MM	19MM SQ	BRAIDED CABLE 8MM TERMINAL



AVBL025	150MM	25MM SQ	COMPLETE WITH TERMINAL COVERS
AVBL026	230MM	25MM SQ	COMPLETE WITH TERMINAL COVERS
AVBL027	310MM	25MM SQ	COMPLETE WITH TERMINAL COVERS
AVBL028	380MM	25MM SQ	COMPLETE WITH TERMINAL COVERS
AVBL029	450MM	25MM SQ	COMPLETE WITH TERMINAL COVERS
AVBL030	550MM	25MM SQ	COMPLETE WITH TERMINAL COVERS



AVBL031	150MM	16MM SQ	UNIVERSAL BATTERY LEAD
AVBL032	230MM	16MM SQ	UNIVERSAL BATTERY LEAD
AVBL033	310MM	16MM SQ	UNIVERSAL BATTERY LEAD
AVBL034	150MM	25MM SQ	UNIVERSAL BATTERY LEAD
AVBL035	230MM	25MM SQ	UNIVERSAL BATTERY LEAD
AVBL036	310MM	25MM SQ	UNIVERSAL BATTERY LEAD

OTHER COMBINATIONS MADE TO ORDER

PLUGS AND SOCKETS



AV6-00010 24V N type Aluminium plug
AV6-00011 24V S type Aluminium plug
AV6-00012 24V N type Plastic plug
AV6-00013 24V S type Plastic plug
Complete with Rubber Boot



AV6-00020 24V N type Aluminium socket
AV6-00021 24V S type Aluminium socket
AV6-00022 24V N type Plastic socket
AV6-00023 24V S type Plastic socket
Complete with Rubber Boot



AV6-24D710 24V 7 Pin EBS Socket
Also suitable for ABS
AV6-24S710 24V 7 Pin EBS Socket
Also suitable for ABS



AV6-00712 12V N type Plastic plug
AV6-00713 12V S type Plastic plug
AV6-00710 12V N type Aluminium plug
AV6-00711 12V S type Aluminium plug



AV6-00722 12V N type Plastic socket
AV6-00723 12V S type Plastic socket
AV6-00720 12V N type Aluminium socket
AV6-00721 12V S type Aluminium socket





ELECTRICAL COILS



STANDARD

AV6-3N7616
AV6-3S7616
AV6-3N7622
AV6-3S7622

N type	16 coil Aluminium Plugs
S type	16 coil Aluminium Plugs
N type	22 coil Aluminium Plugs
S type	22 coil Aluminium Plugs



HEAVY DUTY - ARCTIC CONDITIONS

AV6-30072-40PUR
AV6-30073-40PUR

N type	22 coil Aluminium Plugs
S type	22 coil Aluminium Plugs



STANDARD

AV6-30070-40
AV6-30071-40

N type	22 coil Plastic Plugs
S type	22 coil Plastic Plugs



HEAVY DUTY - ARCTIC CONDITIONS

AV6-30070-40PUR
AV6-30071-40PUR

N type	22 coil Plastic Plugs
S type	22 coil Plastic Plugs

EBS COILS



AV6-30047-45

EBS coil complete with 2 plugs.

Also suitable for ABS systems.



AV6-30057-45

Adaptor coil, 15 Pole to twin coil, 2 Aluminium plugs.

AV6-30056-45

Adaptor coil, 15 Pole to twin coil, 2 Plastic plugs.

SECTION 8 BEACONS



HIGH POWERED LED BEACONS	1
ROTATING BEACONS.....	3
XENON BEACONS	4
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EMERGENCY LIGHTS	15
TRIANGLE SIGNS	19



Ministère du Développement durable
et des Infrastructures
Département des Transports

L-2938 Luxembourg

Registre de Commerce: B 27180



L-5201 Sandweiler

Référence: E13*10R05/01*14845*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 31 août 2018

Communication concernant:⁽²⁾
Communication concerning:




- la délivrance d'une homologation
approval granted
- l'extension d'homologation
approval extended
- le refus d'homologation
approval refused
- le retrait d'homologation
approval withdrawn
- l'arrêt définitif de la production
production definitely discontinued

d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of electrical/electronic sub-assembly with regard to Regulation N° 10

Numéro d'homologation par type:
Approval number:

E13*10R05/01*14845*00

Marque d'homologation:
Approval mark:

 10R - 05 14845

1. **Fabricant: (marque commerciale du constructeur):**
Make (trade name of manufacturer):

Amber Valley Developments LLP

2. **Type:**
Type:

AVSBWBEAG

Dénomination(s) commerciale(s) générale(s):
General commercial description(s):

Seatbelt monitoring system

Version(s)/Variante(s):
Version(s)/Variant(s):

Greeneyes beacon (OZ1045):
AVSBWBEAG/DIN, AVBEAG/A/R/01,
AVBEAA01, AVBEAB01, AVBEAG/A01
Triangle sign (OZ1036):
AVTRI1/F, AVTRI1/F/BAR

HIGH POWERED LED BEACONS

R65 and 10R Approved Dual Voltage



AVBEA1
Amber Nano Din Mount

AVBEA2
Amber Nano 3 Bolt

AVBEA3
Amber Nano Magnetic

AVBEA1G
Green Nano Din Mount

AVBEA3G
Green Nano Magnetic Mount

AVBEA4
Amber Din Mount Maxi Beacon



AVBEA5
Amber 3 Bolt Maxi Beacon

AVBEA6
Amber Magnetic Maxi Beacon

AVBEA7
Amber Flexi Din Mount Beacon



AVBEA1B
Blue Nano Din Mount

AVBEA3B
Blue Nano Magnetic Mount

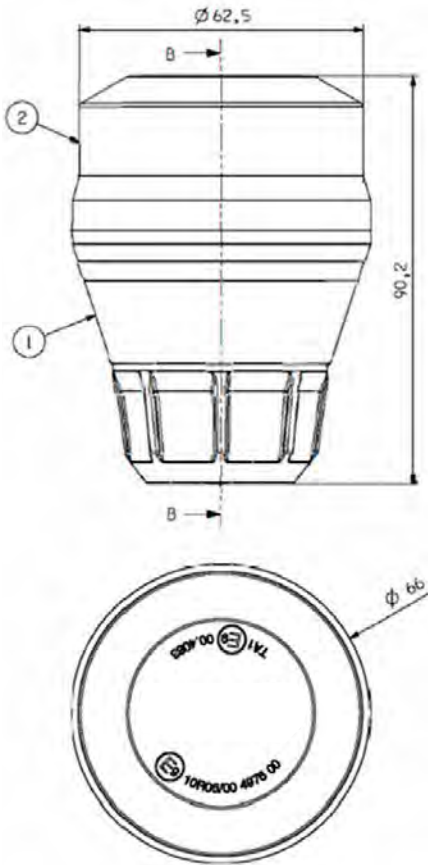
All are completely sealed



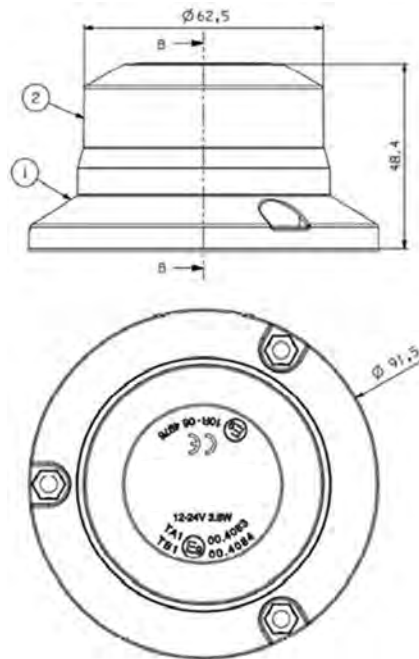
HIGH POWERED LED BEACONS

R65 and 10R Approved Dual Voltage

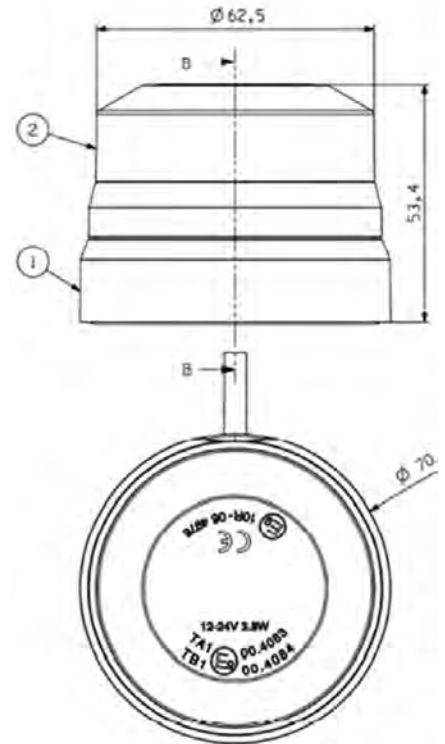
AVBEA1



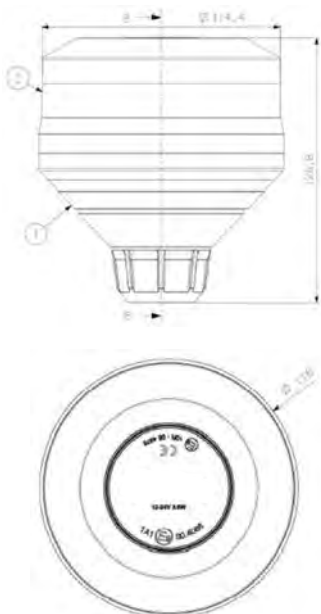
AVBEA2



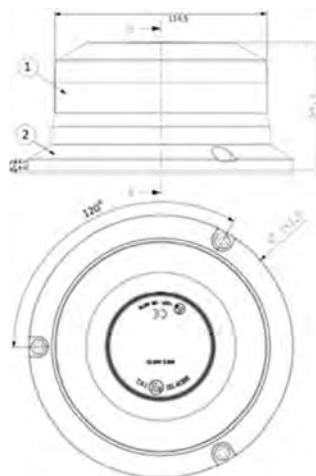
AVBEA3



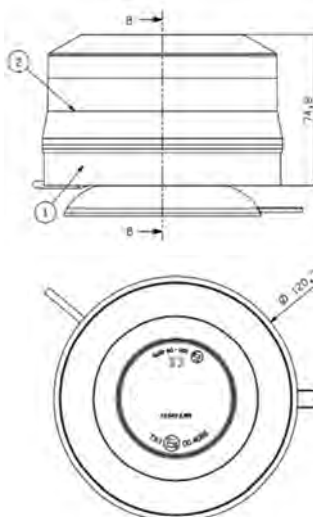
AVBEA4



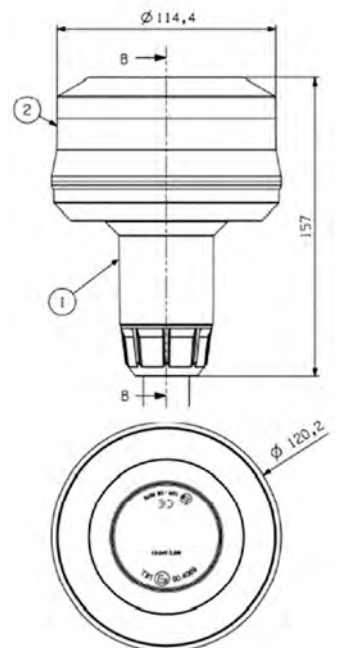
AVBEA5



AVBEA6



AVBEA7

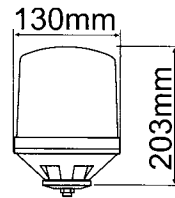


ROTATING BEACONS

Dual Voltage



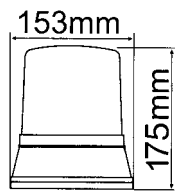
AVBR122 **12-24V**
Single Bolt Amber Beacon
 Supplied without bulb



Single Point



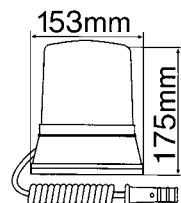
AVBR255K **12-24V**
3 Point Fix Amber Beacon
 Supplied without bulb



3 Point



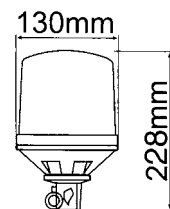
AVBR260K **12-24V**
Magnetic Mount 70mph Rated Amber Beacon
 Supplied without bulb



Magnetic



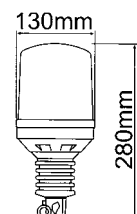
AVBR270 **12-24V**
DIN Mount Amber Beacon
 Supplied without bulb



Din



AVBR272 **12-24V**
Flexi DIN Mount Amber Beacon
 Supplied without bulb



Flexi Din



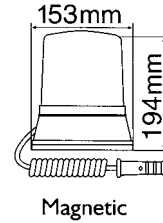
AVBRLens
Spare Amber Lens for AVBR Range



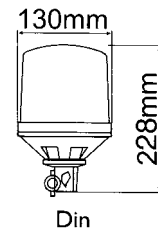
XENON BEACONS



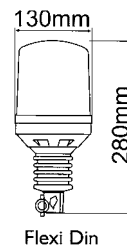
AVXCB0202 **12-100V**
Compact Xenon Beacon
Magnetic Mount



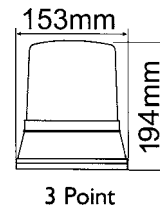
AVXCB0302 **12-100V**
Compact Xenon Beacon
DIN Mount



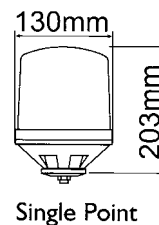
AVXCB0402 **12-100V**
Compact Xenon Beacon
Flexi DIN Mount



AVXCB0502 **12-100V**
Compact Xenon Beacon
3 Point Fixing



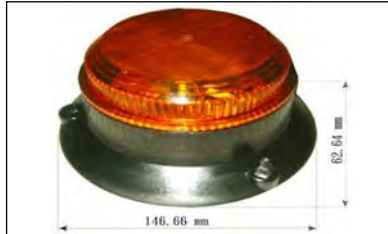
AVXCB0602 **12-100V**
Compact Xenon Beacon
Single Bolt Fixing



AVXCBLENS
Spare Lens for AVXCB Range

XENON BEACONS

High Powered

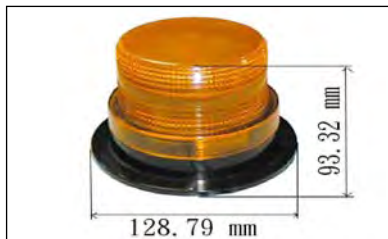


AVXCBNV1611H/H

12-100V

Hedgehog Beacon

Ideal for mounting
Vertically or Horizontally



AVXCBNV1611

12-100V

Budget Xenon Beacon

Ideal for Off Highway Applications

AVXCBNV1611TUBE

Spare xenon tube for AVXCBNV1611



AVXCBNV1611GUARD

Safety guard for AVXCBNV1611

AVXCBNV1611LENS

Spare lens for AVXCBNV1611



AVXCBNV2111

12-100V

2 Position Fixing Xenon Beacon

Ideal for Fork Truck or
Off Highway Applications

AVXCBNV2111TUBE

Spare xenon tube for AVXCBNV2111



AVXCBNV2111LENS

Spare Lens for AVXCBNV2111



AVXCB5434

12-100V

3 Position Fixing Xenon Beacon

Ideal for Fork Truck or
Off Highway Applications



AVXCB5450

12-100V

3 Position Fixing Xenon Beacon

Ideal for Fork Truck or
Off Highway Applications



BEACON ACCESSORIES

Spigot/Din Mounts

AVSM001



Weld on

- Twin terminals.
- Rubber cover.

AVSM002



Bolt On

- (Metal nuts).
- Twin terminals.
- Rubber cover.

AVSM003



Twin Bolt Fixing

- Twin terminals.
- Side bracket.
- Rubber cover.

AVSM004



Twin Bolt Fixing

- Twin terminals.
- Rubber cover.

AVSM005



Spigot/Din Mount

- Twin terminals.
- Replacement insert.

AVSM006



Twin Bolt Fixing

- Twin terminals.
- Fold down bracket.
- Rubber cover.

Plugs & Sockets for Beacons and Accessories

AVDINP001



Spare Din Plug

16 Amps max.

AVDINS001



Spare Din Socket

16 Amps max.

AVDINS002



Spare Din Socket

20 Amps max.

Cigar Lighter Plugs, Sockets & Accessories

AVCP001



Fused Cigar Lighter Plug
for auxiliary accessories.

AVCP002



Cigar Lighter Plug
for auxiliary accessories.

AVGF7001



Cigar Lighter Plug
with 3 metres spiral cable.

AVCL001 12V



Universal Illuminated Cigar Lighter Plug
with holder, 12 Volt.

AVCL002



Twin Adaptor
1 cigar lighter and 1 socket.

AVCL003



Twin Adaptor
with cable, 1 cigar lighter and 1 socket.

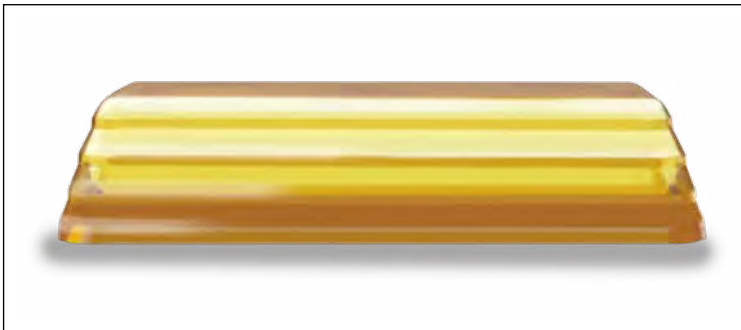
MINI LIGHT BARS



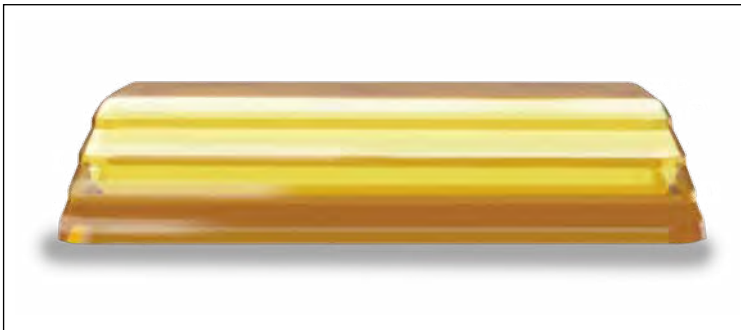
AVBRLB1 12-24V
2 Bolt Mini Light Bar - Rotating



AVBRLB2 12-24V
Magnetic Mount Mini Light Bar - Rotating



AVBRLB4 12-24V
Magnetic Mount Mini Light Bar - Xenon



AVBRLBLENSA
Amber lens for AVBRLB Range

Other Light Bars available to special order



SEATBELT MONITORING SYSTEMS

Why use Amber Valley Seatbelt Systems?

Amber Valley Seatbelt Systems are specifically designed for ease of fitting. The junction box is manufactured in the United Kingdom and is fully waterproof and uses Superseal connectors. The junction box can be purchased independently and will work with any seatbelt/beacon combination. The beacons we use are manufactured by us in the United Kingdom and meet all the UK requirements. They are extremely low-profile dual-voltage and because they are totally sealed, sonic-welded and encapsulated they perform excellently in the harsh environments they work in. All parts and components are E marked and EMC tested and all kits are fully function tested to guarantee a fit-and-forget installation. For special vehicles we can modify the system to suit any OEM special requirements.

FOR SYSTEMS WITH RELAY OR BUZZER LIGHT PLEASE SPECIFY VOLTAGE

These systems are becoming widely used, especially for construction equipment where there is no cab on the vehicle and the driver/operator can fall off, resulting in serious injury or even death. The idea is that health and safety officers/inspectors can see if a seatbelt is being worn as the green beacon will flash. These devices are for off highway applications in the main as the green beacon is used on highway by doctors. Our "Greeneyes" beacon is very low profile, single bolt fix with the power cable coming through the mounting bolt for ease of fitting. It used the same Cree XPE LEDs as used in our Alarmalight® ranges and the unit is completely sealed by sonic welding. The electronics and LED lights are encapsulated with epoxy resin. The void of the unit is filled with expanding foam to reduce weight and finally sealed with epoxy and a cap. This makes the Greeneyes probably the most robust beacon of its kind.

There are four main kits in the range:

AVSBW1LEDG AVSBW2LEDG AVSBW3LEDG AVSBW4LEDG
AVSBW5LED AVSBW6LED AVSBW7LED

Spares/Combinations



AVBEAG/A01



ICBGREEN12V or 24V



AVSBW



AVSBHARN1
Four-way to twin and two singles



AVSBWBEAGDIN



AVSJB1/12V or 24V



AVSBWF



AVSBHARN2
Four-way to three-way



AVSBWBEAG



AVSJB2



AVSBW3P



AVSBHARN3
Six-way to 2 x 2 way



AVSBHARN4
Six-way to three-way and two-way

SEATBELT MONITORING SYSTEMS



AVSBW1LEDG 12-24V



Seatbelt Monitoring System FOR OFF HIGHWAY USE ONLY

Consists of a two point fixing amber lap belt (for easy visibility) with an electrical buckle and our Greeneyes beacon.

- Dual voltage
- CE and emc approved

AVSBW2LEDG 12-24V



Seatbelt Monitoring System FOR OFF HIGHWAY USE ONLY

Consists of a two point fixing seatbelt with electrical buckle and our Greeneyes beacon.

- Dual voltage
- CE and emc approved

AVSBW3LEDG 12-24V



Seatbelt Monitoring System FOR OFF HIGHWAY USE ONLY

Consists of a three point fixing seatbelt with fixed metal electrical buckle and our Greeneyes beacon. This is for vehicles/equipment with a cab fitted.

- Dual voltage
- CE and emc approved

Seatbelt Spares

AVSBW

Amber fixed buckle
two point seatbelt



AVSBWBEAG

Greeneyes beacon

AVSBWF

Amber flexible buckle
two point seatbelt



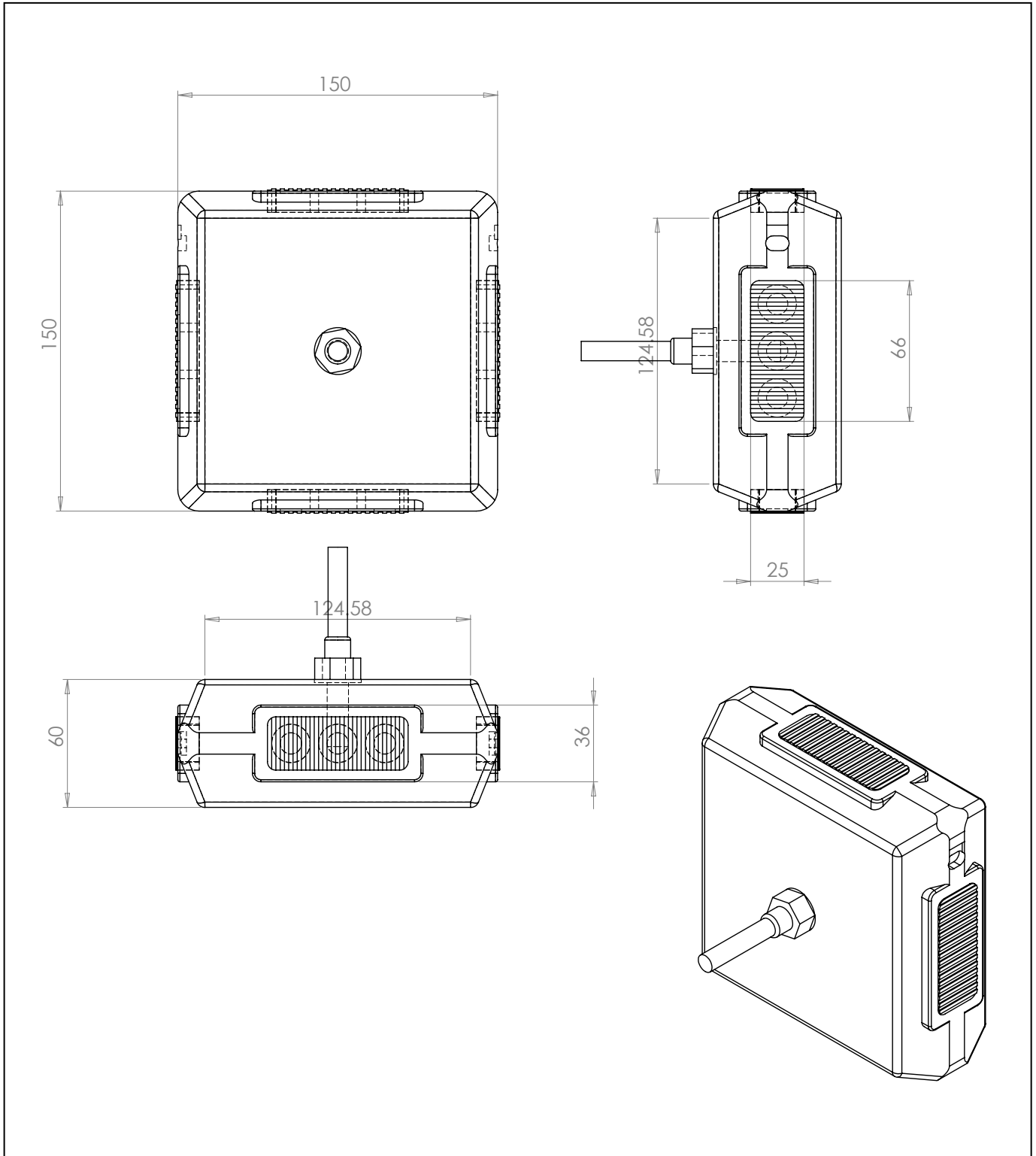
AVSBW3P

Black three point
seatbelt





SEATBELT MONITORING SYSTEMS



SEATBELT MONITORING SYSTEMS



AVSBW5LED 12 OR 24V

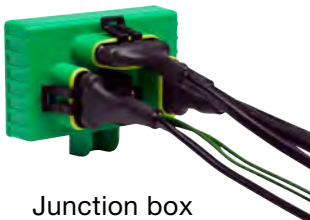
Vehicle with cab, without immobiliser



Double beacon



Buzzer
LED light



Junction box
with relay



OPTIONS

- Single beacon
- Din beacon
- Flexible belt

PLEASE SPECIFY VOLTAGE FOR RELAY

AVSBW6LED 12 OR 24V

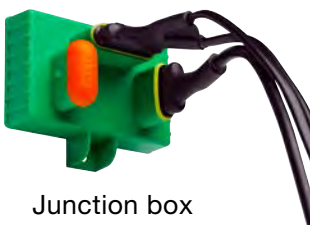
Vehicle with cab, without immobiliser



Double beacon



Buzzer
LED light



Junction box
without relay



Consists of a two point fixing seatbelt with electrical buckle and our Greeneyes beacon.

- Dual voltage
- CE and emc approved

“MAKING THE WORKPLACE SAFER”



SEATBELT MONITORING SYSTEMS

AVSBW7LED 12-24V

Vehicle without cab



Double beacon

OPTIONS

- Single beacon
- Din beacon
- Flexible belt



Junction box without relay



WIRING DIAGRAM

Six-way
Superseal to
two-way and
three-way

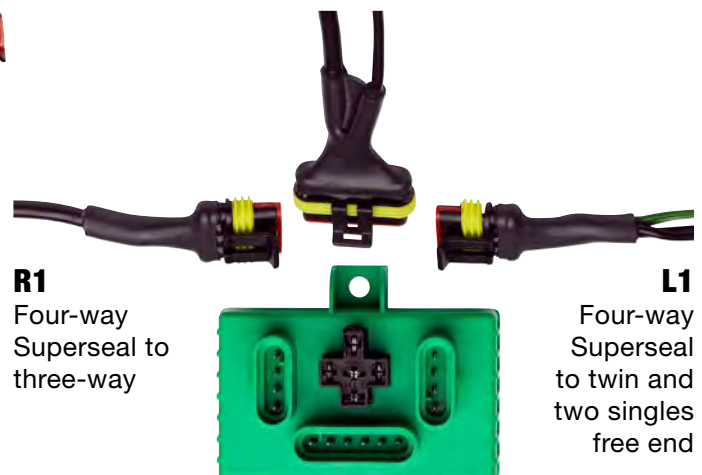


OR

Six-way
Superseal to
2 x 2
Superseal



Depending on beacon type



R1
Four-way
Superseal to
three-way

L1
Four-way
Superseal to twin and
two singles
free end

L.E.D. LIGHTS

Quad Flash



LED Warning Lights

These units are NOT programmable as in certain European countries the only light pattern allowed for this type of warning light is quad flash, which is flash pattern of this range.

These units can be synchronised using the third wire, however our research has shown that NON-synchronised units are more likely to attract attention as they stimulate the alerting triggers in the brain.

These lights use high powered Cree XP-E LEDs for longer life and as such are not overdriven meaning the quality of colour will be stable.

- Dual voltage 12-24V
- Cree XP-E LEDs
- emc approved
- IP67

AV3LEDA 12-24V
AMBER 3 pod LED light



AV3LEDB 12-24V
BLUE 3 pod LED light



AV3LEDG 12-24V
GREEN 3 pod LED light



AV3LEDR 12-24V
RED 3 pod LED light



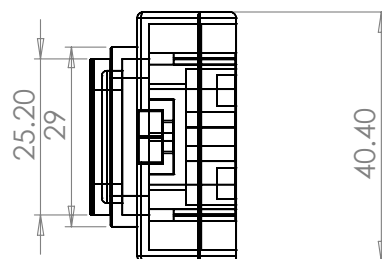
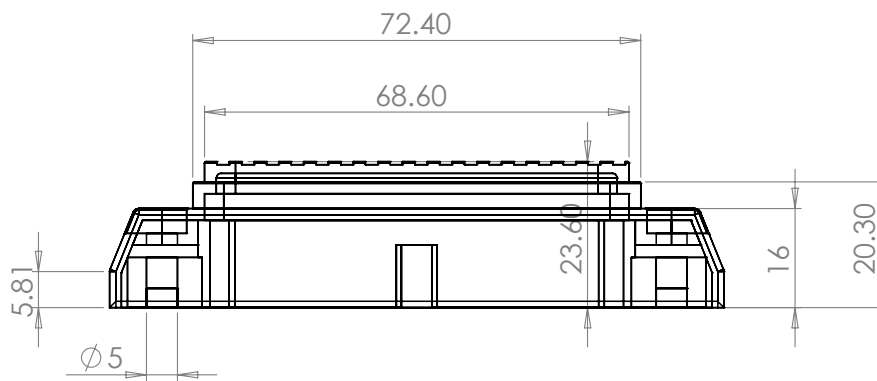
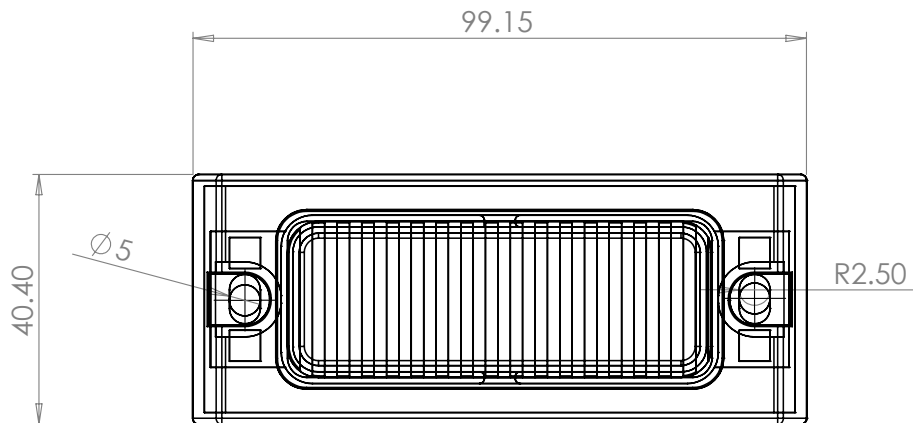
AV3LEDW 12-24V
WHITE 3 pod LED light





L.E.D. LIGHTS

Quad Flash





EMERGENCY LIGHTS

AVEL01 12-24V



9 LED Emergency Light

This 9 pod LED light was originally designed to complement the two 2 pod Alarmalight® range as it can be used to “balance up” the lighting on the rear of the vehicle.

The light can be operated independently or be synchronised with the 2 pod Alarmalight® light pattern. It does not synchronise with the 4 pod Alarmalight®.

Hi powered LED light using Cree XPE LEDs. Ideally suited for construction vehicles and refuse vehicles.

- Dual voltage
- High powered LED lights
- Complete with anti-vibration gasket and mounting screws
- E marked – e11*72/245*2009/19*7568*00
- 10R approved – 10R-037568
- Completely encapsulated
- IP67 rated

AVEL01SP 12-24V



9 LED Wide Load Emergency Light with Ratchet Straps

This unit has been specifically designed for wide loads and heavy machinery movers.

Simply mount the lights using either the optional magnets or ratchet straps, connect the lights to the trailer's power supply and you have instant warning lamps exactly where you want them. Comes complete with superseal connector.

Power leads are available as a special order to suit the individual user vehicle. Mag mounts are ideal for metal tracked vehicles.

- Comes fitted with ratchet straps
- Optional magnets available

AVALMAG

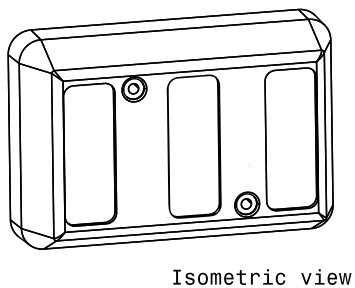
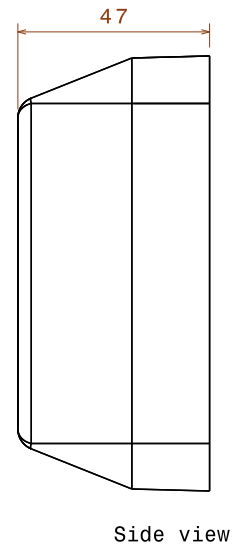
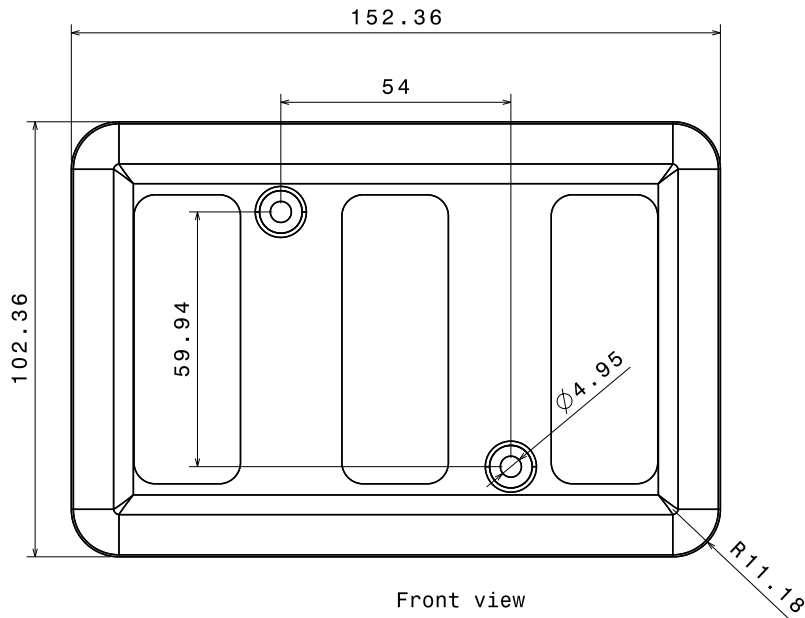
4 pack magnets

AVELPL

Power lead set



EMERGENCY LIGHTS



WIRING INSTRUCTIONS
 RED TO POSITIVE SUPPLY
 BLACK TO EARTH
 YELLOW TO SYNCHRONISE WITH OTHER DEVICES*

*Not all units synchronise – please ask your distributor for further details.

SPECIFICATION

1. RATED VOLTAGE 12-24V
2. WORKING VOLTAGE RANGE 12V THROUGH 24V
3. RATED CURRENT 450 MA
4. MODULATION 70 PER MINUTE
5. OVERVOLTAGE AND SURGE PROTECTED
6. REVERSE POLARITY PROTECTED
7. FULLY ENCAPSULATED WATERPROOF TO IP67
8. ALL DIMENSIONS ARE IN MILLIMETRES
9. CASE MATERIAL ABS/ACRYLIC LENS
10. OPERATING TEMPERATURE -40° TO +50°
11. CABLE LENGTH 330MM

DRAWING NO:
 AVEL01

CUSTOMER PART NO:

CUSTOMER:

AMBER VALLEY DEVELOPMENTS LLP

EMERGENCY LIGHTS



AVTLF01 12-24V
Front Lamp White
Reflectors and
White LEDs



AVTLR01 12-24V
Rear Lamp Red
Reflectors and
Amber LEDs



AVTLF01MAG 12-24V
Magnetic Front Lamp
White Reflectors and
White LEDs



AVTLR01MAG 12-24V
Magnetic Rear Lamp
Red Reflectors and
Amber LEDs



AVTL01MAGLEAD 12-24V
Charging Lead



Fitted with superseal waterproof connector and powerful rubber-covered magnetic mount.

Designed for trailers parked independently at night. The light flashes every 3-4 seconds to warn approaching traffic that the trailer is there. During the day the light sensor switches off the LED light, saving battery power.

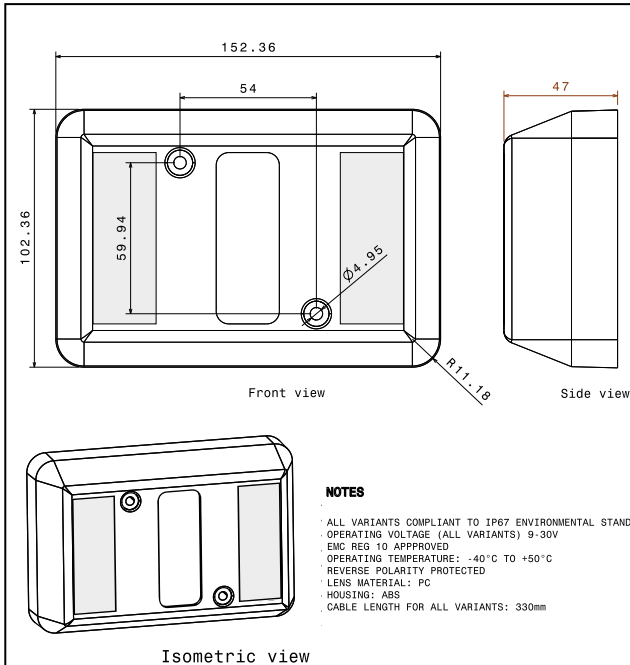
When the trailer is coupled to the tractor unit, the batteries charge automatically, and while charging, the light is off.

The unit is fitted permanently to the trailer for better security, although a mag mount version will be available in the near future.

- Dual voltage charging circuit
- High powered LED lights
- 3M Diamond Grade reflectors
- Completely encapsulated to withstand vibration and shock
- Complete with anti-vibration gasket and mounting screws
- Long life high powered rechargeable batteries
- Light sensor to switch off in daylight
- E marked – e11*72/245*2009/19*7568*00
- 10R approval – 10R-037568
- IP67 rated



EMERGENCY LIGHTS



The **AVTLF** and **AVTLR** ranges have been designed for use where trailers or other non powered equipment have been parked up in an area where visibility is a problem.

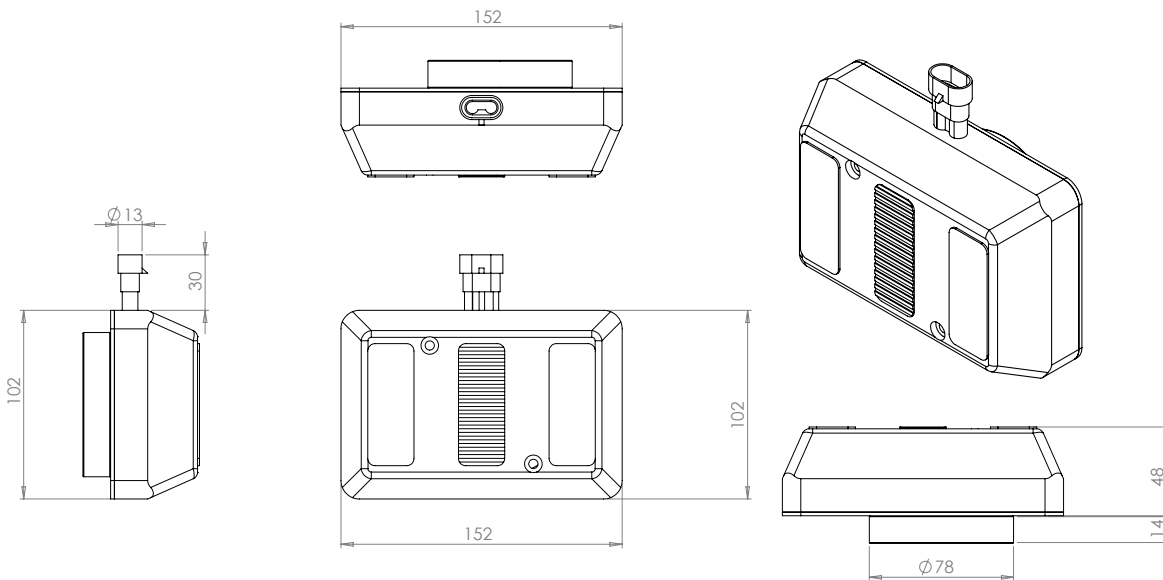
These pieces of equipment frequently cause accidents as they are not visible at night.

The self-powered light is fitted to the trailer or machine – white for the front, amber for the rear.

Only the centre light is used to minimise the amount of power used and maximise the battery life between charges. The outer lenses are fitted with diamond grade reflective material to maximise the visibility.

The light also has a built-in light sensor to conserve power as it only works at night.

The battery on full charge will last for several weeks (typically three weeks).



The **AVTLFMAG** and **AVTLRMAG** ranges can be kept in a service vehicle and when plugged in it will charge the battery. When charging the light does not flash.

It is ideally suited to emergency situations, breakdowns etc. It only works in the dark as it has a light-sensing device built in.

Battery can last for several days between charging.

Only the centre light is used to minimise the amount

of power used and maximise the battery life between charges. The outer lenses are fitted with diamond grade reflective material to maximise the visibility.

The light also has a built-in light sensor to conserve power as it only works at night.

The battery on full charge will last for several weeks (typically three weeks).

This unit comes with a charging lead for cigarette lighters.

TRIANGLE SIGNS

Dual Voltage
Roof Mounted Version



- ✓ Roof Mounted Spring Loaded Hinge
- ✓ Dual Voltage L.E.D Lights
- ✓ Completely Waterproof

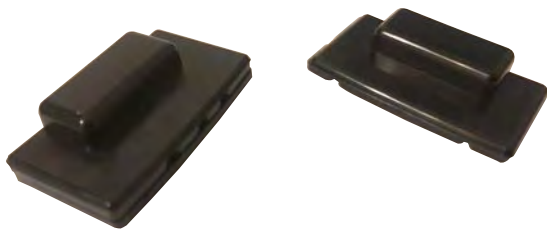
✓ **E13** 10R05/01*14845*00

OTHER GRAPHICS ARE AVAILABLE



TRIANGLE SIGNS

Rechargeable Battery Powered
Free Standing – 12V Only



- ✓ Special On/Off Touch Switch
- ✓ Completely Sealed
- ✓ Charging Cable Included

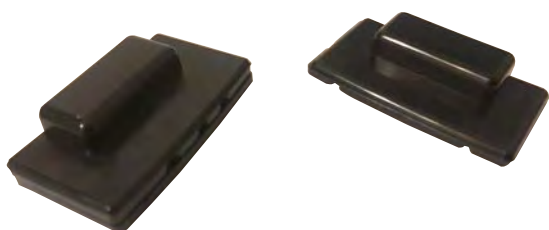
OTHER GRAPHICS ARE AVAILABLE

TRIANGLE SIGNS

Rechargeable Battery Powered
Single Sided – 12V Only – Magnetic



IDEAL FOR WIDE LOADS



- ✓ Dual Voltage L.E.D. Lights
- ✓ Special On/Off Touch Switch
- ✓ Completely Sealed/Waterproof
- ✓ Charging Cable Included

OTHER GRAPHICS ARE AVAILABLE



GRAND-DUCHÉ DE LUXEMBOURG

Ministère du Développement durable
et des Infrastructures
Département des Transports

L-2938 Luxembourg

SOCIÉTÉ NATIONALE DE
CERTIFICATION ET D'HOMOLOGATION
S.A.V.I.

Registre de Commerce: B 27180

L-5201 Sandweiler



Référence: E13*10R05/01*14845*00

Annexes: - Rapport Technique
- Fiche de Renseignements du constructeur

Luxembourg, le 31 août 2018

Communication concernant:⁽²⁾

Communication concerning:



- la délivrance d'une homologation

approval granted

- l'extension d'homologation

approval extended

- le refus d'homologation

approval refused

- le retrait d'homologation

approval withdrawn

- l'arrêt définitif de la production

production definitely discontinued

d'un type de sous-ensemble électrique/électronique⁽²⁾ en ce qui concerne le Règlement N° 10
of a type of electrical/electronic sub-assembly with regard to Regulation N° 10

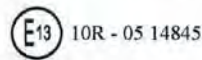
Numéro d'homologation par type:

Approval number:

E13*10R05/01*14845*00

Marque d'homologation:

Approval mark:



10R - 05 14845

1. Fabricant: (marque commerciale du constructeur):

Make (trade name of manufacturer):

Amber Valley Developments LLP

2. Type:

Type:

AVSBWBEAG

Dénomination(s) commerciale(s) générale(s):

General commercial description(s):

Seatbelt monitoring system

Version(s)/Variante(s):

Version(s)/Variant(s):

Greeneyes beacon (OZ1045):

AVSBWBEAGDIN, AVBEAG/A/R/01,

AVBEAA01, AVBEAB01, AVBEAG/A01

Triangle sign (OZ1036):

AVTRI1/F, AVTRI1/F/BAR

SECTION 9 LIGHTING



WIRELESS TRAILER LIGHTS	1
L.E.D. STRIP LIGHTS	2
DAISY CHAIN LIGHTING	3
ROUND INTERIOR LIGHTS.....	4
Recessed, Surface Mounted, with P.I.R., Trauma Lights	
SCENE LIGHTS	7
Strip Lights in Aluminium Housing – Various Colours	
HIGH LEVEL BRAKE & SPEED CAMERA LIGHTS	12
HIGH LEVEL LIGHTS.....	13
CAMERA COMBINATION	14
NUMBER PLATE LIGHT	15
SIDE MARKER LIGHT	15
CAMERA SYSTEMS.....	16
Side and Rear, Reverse Camera System	
WORK LAMPS	20
L.E.D. BLUE PERIMETER LIGHT	22
L.E.D. WORK LIGHT	22



Intellectual
Property
Office

Certificate of Grant of Patent

Patent Number: GB2586468
Proprietor(s): David Morewood
Inventor(s): David Morewood

This is to Certify that, in accordance with the Patents Act 1977,

a Patent has been granted to the proprietor(s) for an invention entitled
"Low profile interior light" disclosed in an application filed **19 August 2019**.

Dated 12 October 2022

Adam Williams

Comptroller-General of Patents, Designs and Trade Marks
Intellectual Property Office

The attention of the Proprietor(s) is drawn to the important notes overleaf.

Intellectual Property Office is an operating name of the Patent Office

WIRELESS TRAILER LIGHTS



AVTRAIL1KIT



This handy wireless Trailer Light System comes in a handy carry/storage case.

Kit comprises

- Left-hand and right-hand rear combination lights
- 7-pin Plug with built-in transmitter
- USB charging lead



AVHL1R/H



LED Headlight Combination

Combination Light including:

- High and Low beam Head Light
- Daytime Running Light
- Indicator Arrow – Front
- Indicator Rear Light to warn driver lights are left on

AVHL1L/H





L.E.D. STRIP LIGHTS

Side Cable Entry

AVSL1S12 12V 3 LEDs, 1 of each clip



AVSL2S12 12V AVSL2S24 24V 6 LEDs, 2 of each clip



AVSL3S12 12V 9 LEDs, 2 of each clip



AVSL4S12 12V AVSL4S24 24V 12 LEDs, 2 of each clip



AVSL5S12 12V 15 LEDs, 2 of each clip



AVSL6S12 12V AVSL6S24 24V 18 LEDs, 2 of each clip



AVSL7S12 12V 27 LEDs, 3 of each clip



AVSL8S12 12V AVSL8S24 24V 36 LEDs, 4 of each clip



AVSL9S12 12V AVSL9S24 24V 54 LEDs, 5 of each clip



AVSL10S12 12V AVSL10S24 24V 72 LEDs, 6 of each clip



All strip lights come with sufficient mounting brackets. Both flush mount and 45° mount to reduce the part numbers.

The strip lights are particularly bright using state of the art technology and quality LEDs, which are not overdriven and therefore last longer.

They are suitable for any interior or exterior strip light application as they are silicone sealed to withstand water ingress.

AVCLIP1 Flat Clip



AVCLIP2 45° Clip



AVSL6 12DC 12 volt Strip Light with Plug and 50cm lead to Daisy Chain Lights

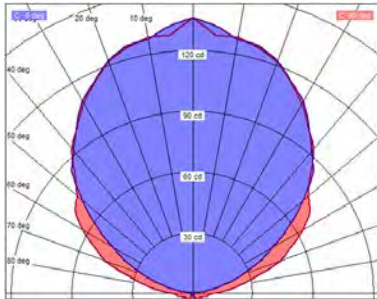
AVSL6 24DC 24 volt Strip Light with Plug and 50cm lead to Daisy Chain Lights

AVSL205 24DC 24 volt Strip Light Stainless Steel

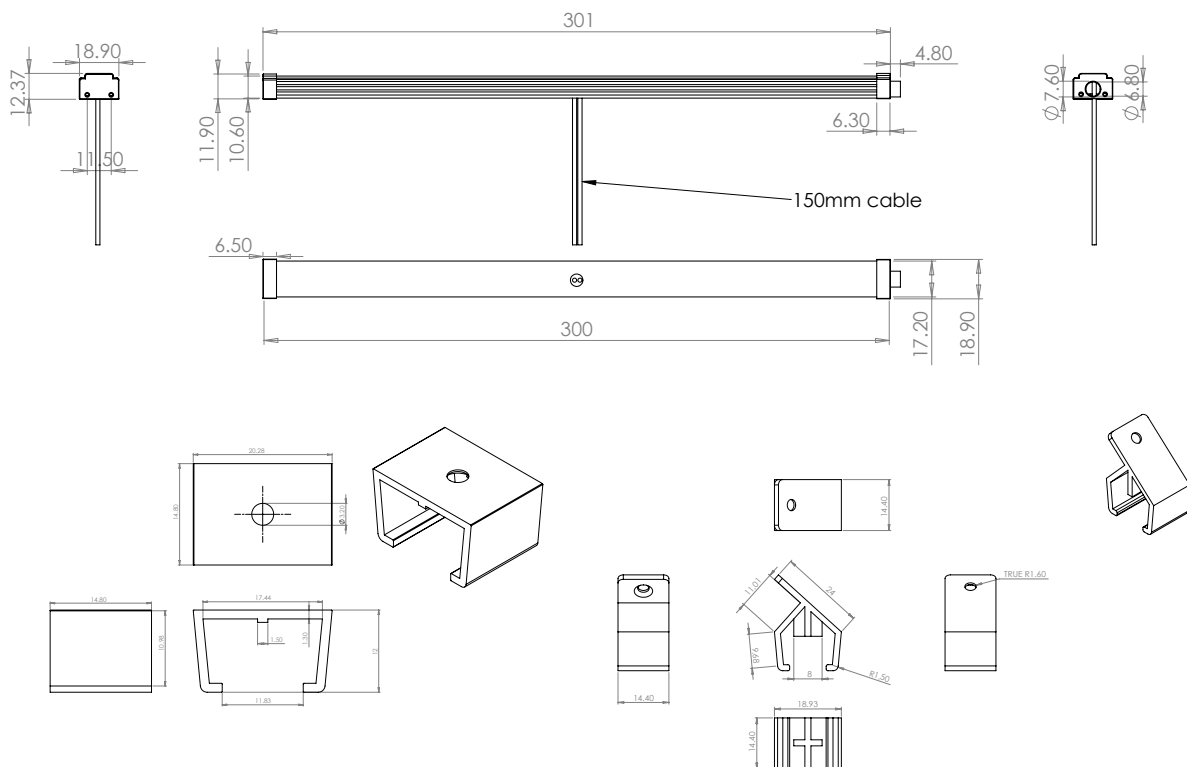
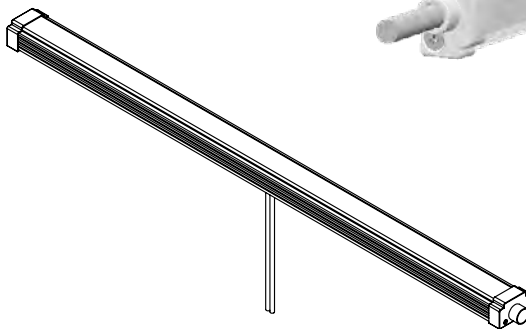
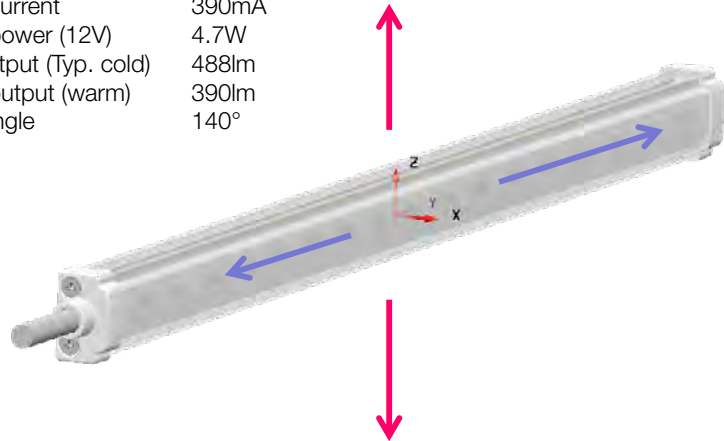


**Ideal for Scene Light above roller shutters.
Lights up Tail Lift area.
Plug and Play.**

L.E.D. STRIP LIGHTS



300mm **diffuse** (18 LEDs)
 LED current 65mA
 Lamp current 390mA
 Lamp power (12V) 4.7W
 LED output (Typ. cold) 488lm
 Lamp output (warm) 390lm
 Light angle 140°



Drawing is for illustration purposes only – all dimensions except for the length remain the same regardless of part number.



RECESSED MOUNTED INTERIOR LIGHTS

Patent No. GB2586468

WITH PIR



WITHOUT PIR



ULTRA LOW PROFILE



111mm

Height without P.I.R.
4.5mm

Height with P.I.R.
4.5mm

Can be own branded
with logo moulded into
housing M.O.Q. applies

Patented Non Dazzle Batwing Style Optics

- (E13) 10R-05 15428
- Own branding available M.O.Q. applies
- Manufactured in the UK
- Dual voltage 12/24V
- IP69K ingress protection
- 3 Year Warranty
- Laser marked

Part No.	Lumen	P.I.R.	Timed
AVIL1PIR	1269	✓	5 mins
AVIL1R	1269		
AVIL3PIR	339	✓	5 mins
AVIL3R	339		
AVIL5PIR	550	✓	5 mins
AVIL5R	550		
AVIL7PIR	662	✓	5 mins
AVIL7R	662		
AVIL9PIR	971	✓	5 mins
AVIL9R	971		

LE GOUVERNEMENT
DU LUXEMBOURG
Ministère de la Mobilité
et des Infrastructures
Département des Infrastructures
et des Transports

Régistre de Commerce: B 47195
L-5201 Sandweiler
snch

Reference: E13*10R-05*15428*00
Annexes: - Rapport Technique
- Fiche de Remarques du constructeur
Luxembourg, le 10 février 2020

Communication concernant:
- la délivrance d'une homologation
- l'extension d'homologation
- le retrait d'homologation
- l'arrêt définitif de la production

d'un type de sous-ensemble électrique/électronique en ce qui concerne le Règlement N° 10
(of a type of sub-assembly with regard to Regulation N° 10)

Nombre d'homologation par type:
Approuvé unique: E13*10R-05*15428*00
Marque d'homologation:
Approuvé unique: (E13) 10R - 05 15428

1. Fabricant (marque commerciale du constructeur):
Make (trade name of manufacturer): Amber Valley Developments LLP

2. Type:
Type: AVREDULP 20
Dénomination(s) commerciale(s) générale(s):
General commercial description(s): Round Interior Light
Version(s)/Variante(s):
Variants/Version(s): AV1272SM, AV1272R, AV1272SAP08, AV1272RPIR

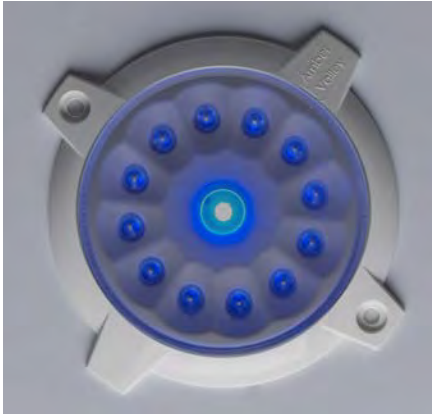
3. Moyens d'identification du type, s'ils sont marqués sur le véhicule / composant / unité technique:
Means of identification of type, if marked on the vehicle / component / technical unit: See item 6.

3.1. Emplacement de ce marquage:
Location of the marking: See item 6.

Page 1 of 5

SURFACE MOUNTED INTERIOR LIGHTS

Patent No. GB2586468



Patented Non Dazzle Batwing Style Optics

- (E13) 10R-05 15428
- Own branding available M.O.Q. applies
- Manufactured in the UK
- Dual voltage 12/24V
- IP69K ingress protection
- 3 Year Warranty
- Laser marked

Part No.	Lumen	P.I.R.	Timed
AVIL1PIR	1269	✓	5 mins
AVIL1R	1269		
AVIL3PIR	339	✓	5 mins
AVIL3R	339		
AVIL5PIR	550	✓	5 mins
AVIL5R	550		
AVIL7PIR	662	✓	5 mins
AVIL7R	662		
AVIL9PIR	971	✓	5 mins
AVIL9R	971		

ULTRA LOW PROFILE



Height without P.I.R.
4.5mm

Height with P.I.R.
4.5mm

Can be own branded
with logo moulded into
housing M.O.Q. applies

ROYAUME DE BELGIQUE
KONINKRIJK DER NEDERLANDEN
Région de Bruxelles-Capitale
Région de Flandre
Région de Wallonie

Ministère de l'Énergie
Ministère de l'Économie
Ministère de l'Environnement

Registre de Commerce: 047185
L-6201 Sandweiler

snch

Référence: E13*10R05*15428*00

Annexes:
- Rapport Technique
- Fiche de Remarques du constructeur

Luxembourg, le 10 février 2020

Communication concernant:
- la délivrance d'une homologation
- l'extension d'homologation
- le refus d'homologation
- le retrait d'homologation
- le retrait d'homologation
- l'arrêt définitif de la production
(production d'éléments de construction)

E13

à un type de sous-ensemble électrique/électronique en ce qui concerne le Règlement N° 10
(d'un type de sous-ensemble électrique/électronique auto-éclairé selon le Règlement N° 10)

Numéro d'homologation par type: E13*10R05*15428*00

Marque d'homologation: E13 10R - 05 15428

1. Fabricant (marque commerciale du constructeur): Amber Valley Developments LLP
Make (trade name of manufacturer):

2. Type: AVRDLUP 20
Type:
Dénomination(s) commerciale(s) générale(s): Round Interior Light
General commercial denomination(s):
Versions/Variantes(s): AVINT2SM, AVINT2R, AVINT2SAPR, AVINT2SPR
Version(s)/Variant(s):

3. Moyens d'identification du type, y compris les marquages sur le véhicule / composant / partie technique: See item 8.
Means of identification of type, if marked on the vehicle / component / technical part: See item 8.

3.1. Emplacement de ce marquage: See item 6.
Location of the marking: See item 6.

Page 1 of 5



A circular, white, dome-shaped LED light fixture. The top surface is covered by a translucent white lens through which 12 small, round LED chips are visible, arranged in a circular pattern. The fixture has a white plastic housing with four mounting tabs around the perimeter. A black power cable is connected to the back of the unit.



Height without P.I.R.
13mm

Height with P.I.R.
14mm

- E13 10R-05 15428
- Own branding available M.O.Q. applies
- Manufactured in the UK
- Dual voltage 12/24V
- IP69K ingress protection
- 3 Year Warranty
- Laser marked

Part No.	Lumen	P.I.R.	Timed
AVIL2PIR	1269	✓	5 mins
AVIL2R	1269		
AVIL4PIR	339	✓	5 mins
AVIL4R	339		
AVIL6PIR	550	✓	5 mins
AVIL6R	550		
AVIL8PIR	662	✓	5 mins
AVIL8R	662		
AVIL10PIR	971	✓	5 mins
AVIL10R	971		



SCENE LIGHT



AVASL2S12ALG
AVASL2S24ALG



AVASL2S12ALW
AVASL2S24ALW



AVASL4S12ALG
AVASL4S24ALG



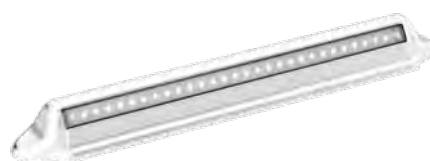
AVASL4S12ALW
AVASL4S24ALW



AVASL6S12ALG
AVASL6S24ALG



AVASL6S12ALW
AVASL6S24ALW





SCENE LIGHT



DOUBLE LED STRIPS – 20, 40 & 60

AVASL2S12ALGHD
AVASL2S24ALGHD

AVASL4S12ALGHD
AVASL4S24ALGHD

AVASL6S12ALGHD
AVASL6S24ALGHD

SCENE LIGHT

Ideal for High Level Mounting



AVHLBL2B



Side Mount or Rear Mount
Scene Light with
Black Housing

AVHLBL2W



Side Mount or Rear Mount
Scene Light with
White Housing

AVHLBL2Y



Side Mount or Rear Mount
Scene Light with
Dayglow Yellow Housing
for Ambulances

AVHLSLW2B



White Light
Ideal for Work Vans and
Breakdown Vehicles



SCENE LIGHT

EUROPE'S LARGEST MANUFACTURER OF REVERSING AND VULNERABLE ROAD USER SAFETY DEVICES



WHITE

AVASL01 - REG 10

WHITE/AMBER

AVASL01D/L - REG 10

WHITE/BLUE

AVASL01/D - REG 10

Scene & Indicator Light

- High Powered Dual Function Lamp
- Powerful 2050lm Scene Light
- Tough Aluminium Housing Base
- 24 Powerful LEDs
- PC Makrolon Hard Coat Lens
- Dual Voltage 12v 24v
- Over-Voltage Protection to Prevent Voltage Spike Damage
- Optional Colours for Cover - Black, Red, White
- Completely Sealed Against Dust & Moisture
- Reverse Polarity Protection
- 10 R Approved
- IP69K
- E57 10R-05 0025

WHITE

LED	24 x Lumileds LUXEON 2835C
	3V 2D
I _A	140mA
V _F	2.98V
LED Power	10.04W
Driver Efficiency	89%
Total Power	11.4W
Total LED Flux	1688lm
Total System Flux	1505lm

AMBER

LED	6 x Lumileds 3535L PC Amber
I _A	170mA
V _F	3.34V
LED Power	3.40W
Driver Efficiency	85%
Total Power	4W
Total LED Flux	331lm
Total System Flux	295lm

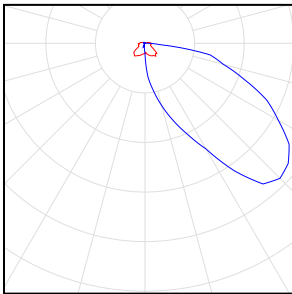
BLUE

LED	6 x Lumileds 3535L Blue
I _A	170mA
V _F	3.18V
LED Power	3.24W
Driver Efficiency	85%
Total Power	3.8W
Total LED Flux	98lm
Total System Flux	79lm

SCENE LIGHT



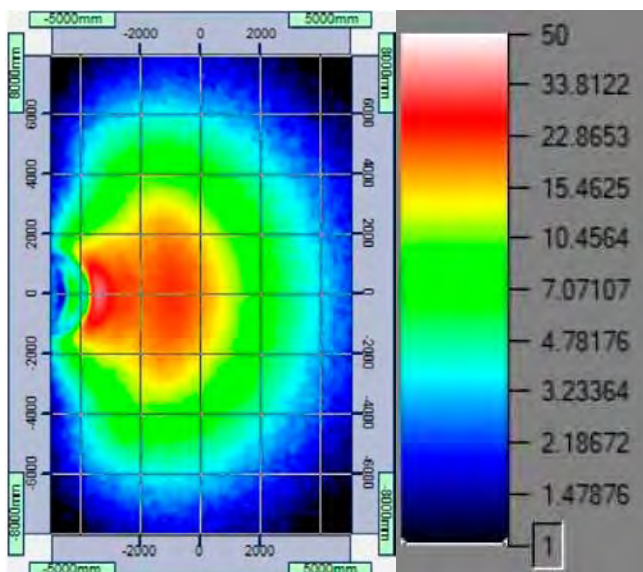
Optical Performance



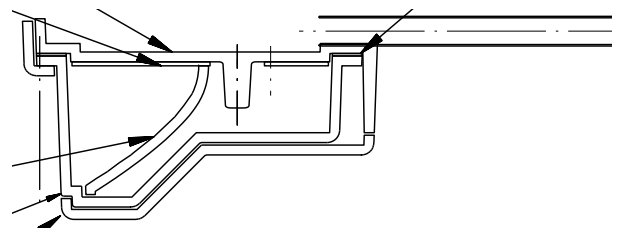
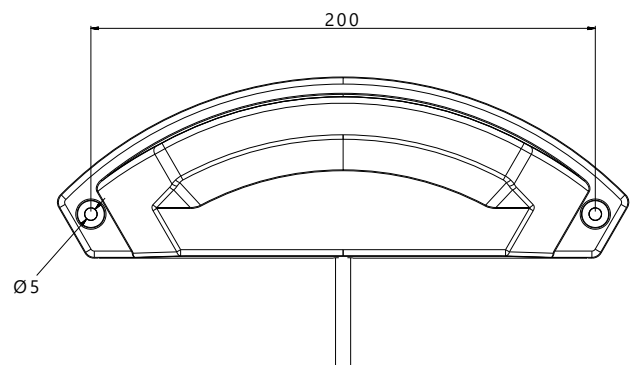
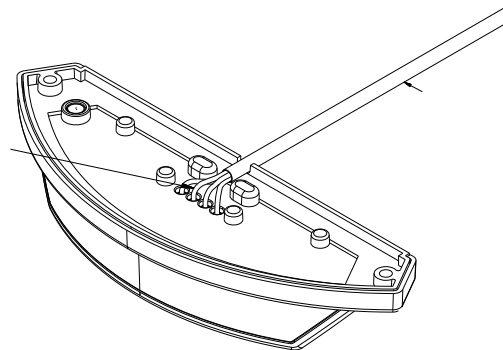
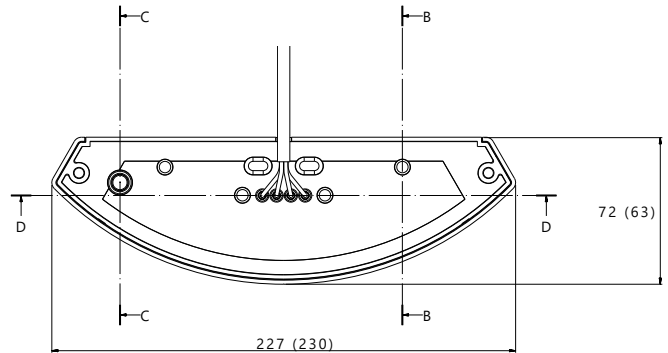
Horizontal Illuminance @ 2.2m

Light output ratio 81.12%
Lamp luminous flux 1688lm
Luminaire luminous flux 1369lm
Luminous efficacy 101.4lm/w

On ground illuminance @ 1.6m from the ground



Dimensions





HIGH LEVEL BRAKE & SPEED CAMERA LIGHT

AVHLBLB1Y



High level constant blue speed camera light for Emergency Vehicles

AVHLBLR1W



High level brake light with white bezel

AVHLBLR1Y



High level brake light with yellow bezel for Ambulances

AVHLBLR1B



High level brake light with black bezel

HIGH LEVEL LIGHT



AVHLBL3B



High level brake light and scene light combination with black housing

AVHLBLW3B



High level dual scene light with both lights white

AVHLBLB3Y



High level speed camera light with scene light for Ambulances

AVHLBLR3W



High level brake light and scene light combination with white housing



CAMERA COMBINATION

High Level Brake Light, Scene Light & Camera
Simple to fit all wiring through one hole

AVHLBL4B



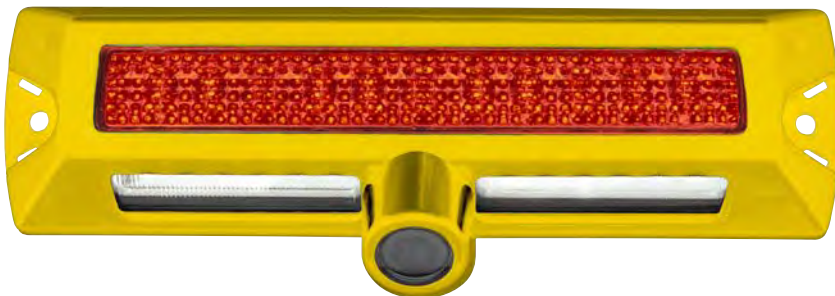
SceneLight
High level brake light and
Camera combination

AVHLBL4W



SceneLight
High level brake light and
Camera combination with
white bezel

AVHLBL4Y



SceneLight
High level brake light and
Camera combination for
Emergency Vehicles

AVHLBLB4Y



SceneLight
High level brake light and
Camera combination with
Speed Camera Light

NUMBER PLATE LIGHT



AVNPL1 (12/24V)

- Dual Voltage 12 – 24v
- Dual Polarity
- Completely sealed waterproof – IP69K
- E Marked
- Complete with gasket & fitting kit
- Made in the UK by amber valley



AVNPL1SS (12/24V)

- With 2-Way Male Superseal Plug
- Dual Voltage 12 – 24v
- Dual Polarity
- Completely sealed waterproof – IP69K
- E Marked
- Complete with gasket & fitting kit
- Made in the UK by amber valley

SIDE MARKER LIGHT AND INDICATOR COMBINATION LIGHT

This light comes with a
Mounting Bracket, if required,
Cable Length and can be fitted
with a connector, if required.
M.O.Q. applies

The Only Side Marker You Need





CAMERA SYSTEMS

Reverse Camera System using Combination Light and Camera System

AVHLBL5SYSB



AVHLBL5SYSW



MONITOR EXTERNAL FEATURES



MONSYS 7
Colour Monitor 7 inch

Technical specification

Ideally suited to light duty applications on highway.

- Waterproof to IP69
- Can take 2 cameras
- Power Requirements: 11V ~ 32V
- Power Consumption: Max 10.5W
- Weight: 4 kg
- Operating Temperature: -15°C to 60°C (5°F to 140°F)

Suitable for: Trucks, coaches, buses



Spares



CAM 10 LEAD
10m extension lead

CAM 20 LEAD
20m extension lead

AVHLBL4B



AVHLBL4W



CAMERA SYSTEMS

Reverse Camera System using Combination Light and Camera System



AVHLBL5SYSY



Technical specification

Ideally suited to light duty applications on highway.

- Waterproof to IP67
- Can take 2 cameras
- Power Requirements: 11V ~ 32V
- Power Consumption: Max 10.5W
- Weight: 4 kg
- Operating Temperature: -15°C to 60°C (5°F to 140°F)

Suitable for: Trucks, coaches, buses



MONITOR EXTERNAL FEATURES



MONSYS 7

Colour Monitor 7 inch

Spares



CAM 10 LEAD

10m extension lead

CAM 20 LEAD

20m extension lead

AVHLBLB4Y





CAMERA SYSTEMS

Reverse Camera System

AVCAMSYS2



AVCAMSYS3



MONITOR EXTERNAL FEATURES



MONSYS 7

Colour Monitor 7 inch

Technical specification

Ideally suited to light duty applications on highway.

- Camera has built in microphone
- Waterproof to IP67
- Can take 2 cameras
- Power Requirements: 11V ~ 32V
- Power Consumption: Max 10.5W
- Dimensions: 158 (W) x 149 (H) x 203 (D) mm
- Weight: 4 kg
- Operating Temperature: -15°C to 60°C (5°F to 140°F)

Suitable for: Trucks, coaches, buses



Spares



CAM10MLEAD

10m extension lead

CAM20MLEAD

20m extension lead



CAM 750 COLOUR REVERSE CAMERA

CAMERA SYSTEMS

Reverse Camera System



AVCAMSYS1



Technical specification

Ideally suited to light duty applications on highway.

- Camera has built in microphone
- Waterproof to IP67
- Can take 2 cameras
- Power Requirements: 11V ~ 32V
- Power Consumption: Max 10.5W
- Dimensions: 158 (W) x 149 (H) x 203 (D) mm
- Weight: 4 kg
- Operating Temperature: -15°C to 60°C (5°F to 140°F)

Suitable for: Trucks, coaches, buses



MONITOR EXTERNAL FEATURES



MONSYS 7

Colour Monitor 7 inch

Spares



CAM 1.5 LEAD
CAM 2M LEAD

CAM 10 LEAD
CAM 20 LEAD

**Spare Leads from
Monitor to Camera**



**CAM 781
SIDE COLOUR CAMERA**



WORK LAMPS



AVWL1R 12-24V

- Round worklamp
- Rubber housing with glass lens
- Metal fixing bracket
- 125 mm
- 12 or 24V H3 Bulb (not included)



AVWL2R 12-24V

- Rectangular worklamp
- Tough ABS housing
- Metal fixing bracket
- 178 mm x 230 mm
- 12 or 24V H3 Bulb (not included)
- On/off switch



AVPC01.00 12-24V

- Square worklamp
- ABS plastic housing
- Metal fixing bracket
- 110 mm
- 12 or 24V H3 Bulb (not included)



AVPC01.00 DEUTSCH 12-24V

- Square worklamp
- ABS plastic housing
- Metal fixing bracket
- 110 mm
- 12 or 24V H3 Bulb (not included)
- This lamp has a DEUTSCH socket moulded into the housing



AVPC02.00 12-24V

- Rectangular Work Lamp
- ABS plastic housing
- Metal fixing bracket
- 160 mm x 100 mm
- 12 or 24V H3 Bulb (not included)



AVPC02.00 AJBA 12-24V

- Rectangular Work Lamp
- ABS plastic housing
- Metal fixing bracket
- 160 mm x 100 mm
- 12 or 24V H3 Bulb (not included)



AVPC03.00 12-24V

- Rectangular twin beam Work Lamp
- ABS plastic housing
- Metal fixing bracket
- 160 mm x 100 mm
- 12 or 24V H3 Bulbs (not included)
- Twin reflectors

WORK LAMPS



AVPC03.00 AJBA 12-24V

- Rectangular twin beam Work Lamp
- ABS plastic housing
- Metal fixing bracket
- 160 mm x 100 mm
- 12 or 24V H3 Bulbs (not included)
- Twin reflectors



AVPL01.00 12-24V

- Square Work Lamp with handle
- ABS plastic housing
- Metal fixing bracket
- 110 mm
- On/off switch
- 12 or 24V H3 Bulb (not included)



AVPC0800 12-24V

- Oval Work Lamp
- Tough ABS housing
- Metal fixing bracket
- 12 or 24V Bulb (not included)



AVPC0900 12-24V

- Oval Work Lamp
- Twin Beam
- Metal fixing bracket
- 12 or 24V Bulbs (not included)
- Tough ABS Housing



AVPC0901 12-24V

- Oval Work Lamp
- Twin Beam
- Metal Fixing Bracket
- 12 or 24V Bulbs (not included)
- Tough ABS housing
- Clear Lens



AVPCMAG

- MAG Mount & Curly Cord
- To suit most Work Lamps
- To allow them to be fitted on a temporary basis



L.E.D. WORK LAMPS



AVWL1LED

Operating Voltage 10-30V
L.E.D. Power 20w
Lumen 1600



AVWL2LED

Operating Voltage 10-30V
L.E.D. Power 25w (19°C) – 42w (30°C)
Lumen 2800–3800

WORK LAMPS – BLUE LINE LIGHTS



AVWL4BLED

Perimeter Warning Blue Line Light

Operating Voltage 10-80V
L.E.D. Power 6w



AVWL3LED

Underslung Scene/Work Light

Operating Voltage 10-30V
L.E.D. Power 18w
Lumen 1190



SECTION 10

ENGINE SHUTDOWN



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ENGINE SHUTDOWN Off Road Safety Equipment



PREVENTS ENGINE SEISURE



FOR OFF HIGHWAY VEHICLES ONLY

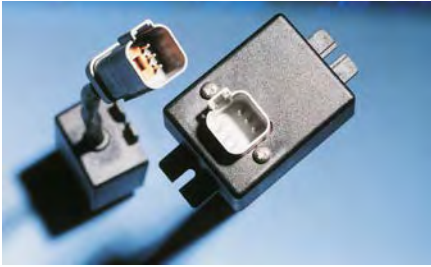


ENGINE SHUTDOWN

Off Road Safety Equipment

AVEMS1

Prevents engine seizure



The engine saver has been designed in collaboration with a major O.E. Plant manufacturer. If the oil pressure drops below a specified level or the engine temperature rises above a specified level, the unit shuts the engine down after 6 seconds via the fuel solenoid, thereby saving costly damage or even engine seizure.

This unit is particularly beneficial to plant hire companies and for static plant where machines are operating in a stand alone situation.

- O.E.M. approved
- Built-in 6 second delay
- Fully encapsulated
- Waterproof
- Simple to fit
- Cost effective

Ideal applications

- On-site dumpers
- Off-road plant
- Generators
- Compressors
- Traffic management equipment
- Marine engines

Benefits

- Saves costly down time
- Saves unjustified warranty claims
- Can increase vehicle component life
- Increase profitability
- Increase customer satisfaction

It is better to shut down than seize up

Available with Deutsch connector or flying leads.
Other time delays available (special order).
Not recommend for on-highway applications.

Tipsafe – The modular solid state body proximity alarm

- Built in 1 sec delay to eliminate false alarms through ‘body bouncing’
- Sensor and ECU are also available as a separate unit
- Fully encapsulated ECU with Deutsch connectors

Kit contents

1. Proximity sensor & ECU with moulded connectors
2. 2 × 5m cable with Deutsch connectors
3. Cab warning lamp (24v)
4. Fixing sensor bracket

Fitting Instructions

Fit sensor bracket in a protected position so that when the sensor is installed it is facing the metal mass of the tipping body.

Fit the ECU in a protected position making sure it is close enough to the sensor for connection.

Fit lamp in-cab of rigid vehicle, or suitable lamp to trailer headboard of articulated vehicle so that it is visible through the driver’s mirror.

Connect power lead to a suitable 24v supply (Red = Positive, Black = Negative)

To adjust the sensor, turn on the power and when the LED on the back of the sensor goes out readjust until it comes on again (allowing approximately 2mm for body play).

The unit will self test itself each time the power is switch on. The lamp will illuminate for approximately 10 seconds and then go off. If this does not happen check the bulb wiring and / or the connectors.



TIPSAFE

TIP1 12-24V

It does what it says on the box



The Tipsafe sensor system has been designed and built using state of the art S.M.D. technology, incorporating a solid state proximity sensor with built in L.E.D. for easy adjustment. The E.C.U. (Electric Control Unit) is encapsulated to withstand vibration, water and dust ingress. All the connectors are AMP superseal connectors which are automotive and industry standard and waterproof. All this and the unit tests itself every time the ignition is switched on making it failsafe.

The E.C.U. and the sensor are available as separate items making replacements due to accidental damage most cost effective.

- 12-24 dual voltage operation
- Reverse polarity protected
- Over voltage protected
- Unique modular design
- Self-testing technology
- Warning lamp or buzzer
- In-built delay to eliminate false alarms due to body bounce
- Fully encapsulated E.C.U. (Electronic control unit)
- AMP superseal waterproof connectors with approx. 5 metres of cable for power and lamp/buzzer leads
- Simple to fit



Legal requirements

It is a legal requirement to fit a visible warning device to vehicles with high level (over 3 metres) power operated equipment to alert the driver if the equipment exceeds a certain height.

It makes sense to fit a Tipsafe system.

It can save costly legal and insurance claims, but more importantly it can save lives.

TIP2 12-24V



This unit has been specifically designed for beavertail trucks where support legs are used when loading and unloading equipment. It is especially used by construction equipment hire companies.

It senses if one or both of the legs has not been raised and sends a warning to the driver, avoiding costly repairs.

It is supplied with a warning light, however it can be supplied with a buzzer or talking alarm.

The unit is dual voltage 12-24V, making it suitable for all vehicle types.

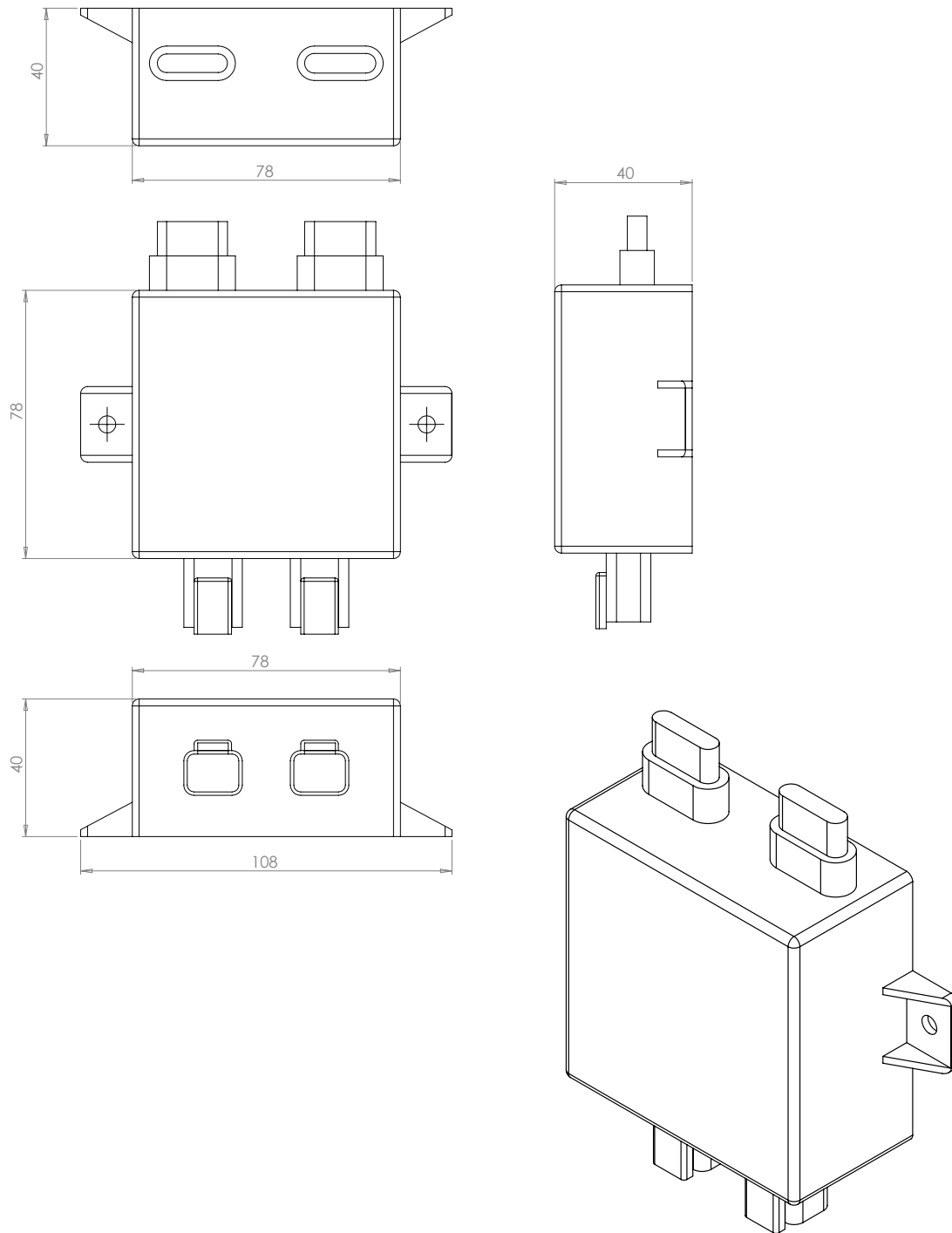
It is also suitable for any vehicle where support legs are in use, e.g. cranes, Hiabs and telescopic handlers.



- 12-24 dual voltage operation
- Reverse polarity protected
- Over voltage protected
- Unique modular design
- Self-testing technology
- Warning lamp or buzzer
- In-built delay to eliminate false alarms due to body bounce
- Fully encapsulated E.C.U. (Electronic control unit)
- AMP superseal waterproof connectors for the sensors
- Deutsch DT waterproof connectors are used for the power lead and warning lead to avoid confusion
- Simple to fit



LEGSAFE



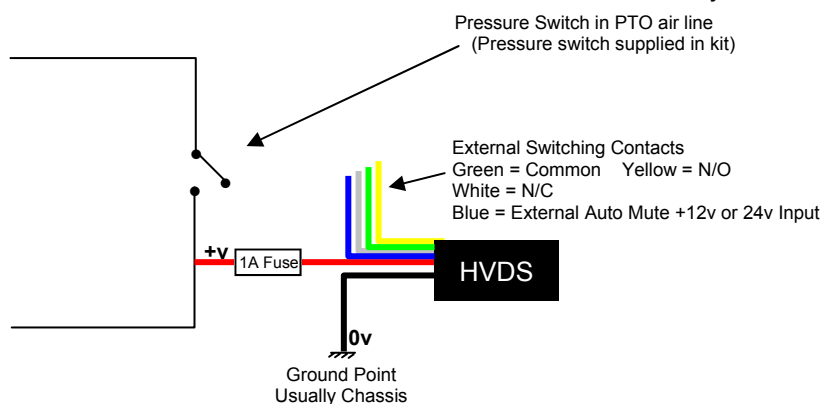
OVERHEAD CABLE DETECTOR



The Amber Valley HVDS is designed to prevent vehicles and machinery with a variable height from coming into contact with high voltage overhead power lines. The system consists of a cab mounted detection antenna and an in cab audio/visual warning unit. The system can sense the presence of overhead power cables from up to 80 meters away warning the operator of the potential danger. Supplied as a standalone unit (12-24v) or as an integrated part of Amber Valley's vehicle safety systems. Can be easily fitted to: Tipper Vehicles, Excavators, Telehandlers, Cranes, Platforms, JCBs etc...

Installation of Amber Valley HVDS

- The unit can be powered from 12v to 24v DC.
- The power for the HVDS should be picked up from the vehicle (see manufacturers guidelines). A pressure switch can be used in the PTO air line so that the HVDS only powers up when the PTO is activated DO NOT CONNECT THE HVDS DIRECTLY TO THE VEHICLES PTO SWITCH
- The detection antenna should be mounted to the roof of the vehicle or as high up as possible. Please ensure that the serrated teeth of the antenna base make contact with a metal surface, i.e. on the under side of the roof. See below...
- Use the 4 self tapping screws to mount the unit to a suitable location inside the cab.
- The detection aerial is connected to the control unit by a twist locking BNC connector.



- The HVDS unit is also fitted with an external switching contact. The three connections are 'COMMON' (Green), 'N/O' (normally open) (Yellow) and N/C (normally closed) (White). When the HVDS detects overhead cables this relay contact will be switched.
- There is also the facility to mute the system via an external input. This can be done by connecting a +12v or +24v signal to the blue wire from the HVDS. Operation: Signal on Blue wire at 0v = The system will have an audible alarm. Signal on Blue wire at +12v or +24v = The system will be muted while the blue wire is held at +v. IMPORTANT - This input must be set to either +12v or +24v this is done by removing the rear casing from the unit and setting the blue jumper link marked "12v LINK". Operation: Blue jumper linking two pins = 12v operation. Two pins not linked = 24v operation. Note this only applies to the external mute feature. The units operating voltage is 12-24v DC.



OVERHEAD CABLE DETECTOR

OPERATION

- When the vehicles PTO is engaged the Amber Valley HVDS should power up.
- The unit will bleep twice when it is powered up. This is to confirm that the unit is active and ready to detect.
- If an overhead power cable is detected the unit will bleep continuously and the red LED will flash.
- When the unit is in alarm mode, i.e. when an overhead cable is detected, the audible alarm can be muted. However, the unit will emit a double bleep every 5 seconds to remind the operator of potential danger. When in mute mode the red LED will continue to flash.
- Mute is automatically cancelled every time the unit is switched off or when the detected signal is lost.

Power Cable Warning Indicator.
This will flash red when overhead power cables are detected



Power 'ON' Indicator

Mute Button

WHAT TO DO IN AN EMERGENCY

- Never touch an overhead line - even if it has been brought down by machinery, or has fallen. NEVER ASSUME LINES ARE DEAD.
- When a machine is in contact with an overhead line, electrocution is possible if anyone touches both the machine and the ground. Stay in the machine and lower any raised parts in contact or drive the machine out of the lines if you can.
- If you need to summon help or because of fire, jump out as far as you can without touching any wires or the machine - keep upright and away.
- Get the electricity company to disconnect the supply. Even if the lines appears dead, do not touch it - automatic switching may reconnect the power.

CONTACT THE EMERGENCY SERVICES AND REPORT THE INCIDENT

Self Test and Failsafe Feature

Self Test feature - The HVDS has a self test feature which is operated automatically each time the unit is powered up. On power up, the unit will emit two short bleeps and the red warning LED will flash twice. This confirms that the unit is working and ready to detect.

WARNING!

Before using this product please read and fully understand the instructions provided. The Amber Valley HVDS is to be used for guidance purposes ONLY and must not be relied upon to prevent contact with overhead power cables. Amber Valley LLP or its representatives accept no responsibility for direct or indirect damage or injury whilst using this product. **SAFETY DURING USE IS SOLELY THE RESPONSIBILITY OF THE OPERATOR.**

OVERHEAD CABLE DETECTOR



Guidance for working safely near overhead power lines

The Amber Valley HVDS detects the presence of overhead power lines by sensing the electrical field which they generate. Therefore the HVDS will only detect overhead power lines when they are energised. An extremely dangerous situation can occasionally occur when overhead power lines are temporarily switched off as the HVDS would not detect the presence the overhead lines which could become re-energised at any time. When using a vehicle fitted with a Amber Valley HVDS the following safe working procedures should be ALWAYS carried out.

- BE PARTICULARLY CAUTIOUS WHEN PASSING THROUGH AREAS WHERE THE HVDS HAS PREVIOUSLY DETECTED POWER LINES
- ALWAYS VISUALLY INSPECT YOUR WORK AREA AND FAMILIARISE YOURSELF WITH THE POSITION OF OVERHEAD CABLES.
- FIND OUT the maximum height and maximum vertical reach of your machines and those used by contractors.
- FIND OUT the routes of ALL overhead lines on your land or near your boundaries. Mark them on a map. The electricity company will give you this information.
- MAKE SURE you have information about all the lines on your land - if not, contact the owners of those lines.
- MAKE SURE you have details of the maximum working heights permitted under each span of overhead line on your land and adjacent to each structure. Mark these on a map.

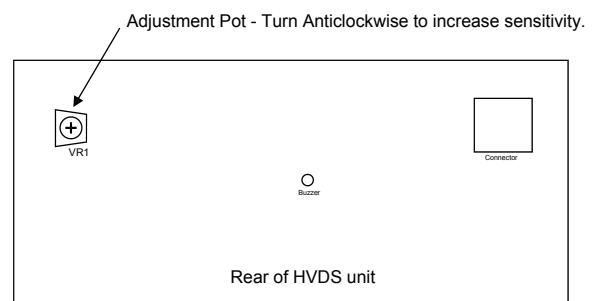
Sensitivity Adjustment of the Amber Valley HVDS

The Amber Valley HVDS can be adjusted for sensitivity by the operator.

The HVDS is preset for optimal sensitivity, i.e. good detection range with minimal false alarms. If however greater/lesser sensitivity is required please carry out the following procedure.

- Locate the adjustment pot as detailed below.
- Carefully adjust the pot taking care not to adjust the pot beyond it's limits.

THE HVDS IS FACTORY SET FOR OPTIMUM DETECTION. AMBER VALLEY DOES NOT RECOMMEND USER ADJUSTMENT OF THE SENSITIVITY.





OVERHEAD CABLE DETECTOR

AVWW2 12-24V

Active High Voltage Overhead Cable Detection System

Specifications



Operating Voltage: 12-24 V DC

Nominal Operating Current: < 150mA

Size: W 130mm × H 65mm × D 25mm

Weight: 155g

Nominal Operating Temperature: -5°C to +55 °C

HV Detection Range: Up to 80 meters*

Warning Tone: High pitch pulsed buzzer approx. 85db

Visual Warning: High Intensity **RED** flashing LED

Power Indicator: High Intensity **GREEN** LED

Mute Facility: System can be muted once activated.

When Mute is active a double reminder tone is emitted every 5 seconds.

Detection Antenna

Length: 235mm

Weight: 60g

This system can be supplied as a standalone unit or as part of the Amber Valley Complete Vehicle Safety System.

*Under ideal operating conditions. The detection range depends on the voltage being detected generally, the higher the voltage the greater the detection range.



SECTION 11
RELAYS AND FLASHER UNITS



FLASHER UNITS.....1

HAZARD RELAYS2

MICRO RELAY3

RELAYS.....4









HEAVY DUTY CONTACTORS.....6

RELAY SOCKETS6

FLASHER UNITS










LED FLASHER UNITS are in RED housings




























Our Code	Description	Pins	Watt	Voltage	Applications	Bulb failure warning	Connection
AVFU011	for LED applications	3	0-40W	12	 	No	
AVFU012	for LED applications	3	0-40W	24		No	
AVFU015	for LED applications	4	0-40W	24	 	No	

LED DIAGNOSTIC FLASHER UNITS are in RED housings

These units are programmed for specific LED lights and are not universal

Our Code	Description	Pins	Watt	Voltage	Applications	Bulb failure warning	Connection
AVFU016	LED with Diagnostic	3	10W	12	 	No	
AVFU017	Hybrid LED for Bulb & LED Circuits	4	10W	12		No	
AVFU018	Hybrid LED flasher unit with Diagnostic	4	10W	12		No	

BULB FLASHER UNITS are in BLUE housings

Our Code	Description	Pins	Watt	Voltage	Applications	Bulb failure warning	Connection
AVFU001	Flasher Unit Universal	2	180W	12	 	No	
AVFU002	Flasher Unit Universal	3	180W	12	 	No	
AVFU005	Flasher Unit Din 3	3	42-92W	12		Yes	
AVFU006	Flasher Unit Din 3	3	42-92W	24	  	Yes	
AVFU007	Flasher Unit SAE Standard	4	42-92W	12		Yes	
AVFU009	Flasher Unit Din 4	4	6x21W	12	  	Yes	
AVFU010	Flasher Unit Din 4	4	6x21W	24	  	Yes	
AVFU013	Flasher Unit	3	42-92W	12	 	Yes	
AVFU014	Flasher Unit	5	42-92W	12		Yes	



HAZARD RELAYS



REVERSE HAZARD RELAY

Our Code	Description	Voltage	Applications	Connection Board
AVRHR12V	Reverse Hazard Relay	12		
AVRHR24V	Reverse Hazard Relay	24		

This electronic relay automatically operates the vehicle hazard lights when reverse gear is selected. It is a perfect safety device for Trucks and Buses, providing a highly visible warning automatically that the vehicle is reversing; it is suitable for fitting with any of our reverse alarms.



BRAKE HAZARD RELAY

Our code	Description	Voltage	Applications	Connection Board
AVBHR12V	Brake Hazard Relay	12		
AVRHR24V	Reverse Hazard Relay	24		

This is a unique safety product which measures deceleration of a vehicle while braking. Under severe or emergency braking conditions the Brake Hazard Relay will activate the vehicle's hazard warning lights to alert vehicles behind of a potential collision.



It is critical that this unit is mounted in the prescribed manner.

The BHR works by automatically switching on the Hazard Warning Lights if the vehicle has to brake severely in an emergency. The Hazard Warning Lights then continue to flash after the vehicle has released its brakes and the brake lights have turned off. This will warn vehicles approaching from behind of the impending danger of stationary or slow moving vehicles in front and help to prevent a rear end collision. The BHR will turn off the Hazard Warning Lights and revert back to its normal setting after 10 seconds. Normal functioning of the Hazard Lights is not affected by the BHR.

HORN RELAYS - STANDARD



























Our Code	Relay	Type	Voltage	Amp	Information	Wiring Diagram
AVMBR001	Normally Open	B	12	30		
AVMBR002	Normally Open	B	24	20		
AVMBR003	Normally Open	B	12	30	Double Contact	
AVMBR004	Normally Open	B	24	20	Double Contact	
AVMBR007	Change Over	B	12	20/30		
AVMBR008	Change Over	B	24	20/10		

MICRO RELAY



A remote control switch for automotive uses, closing load, with a 12V or 24V rated voltage. All our products can be personalised on request in two ways: by printing your logo on the side of the case or moulded your logo on the case.



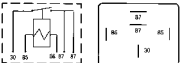
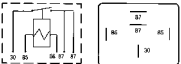


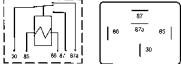

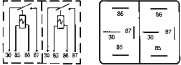

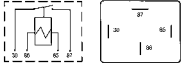

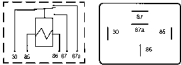
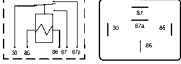



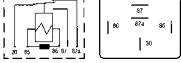
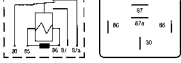
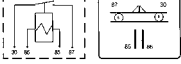
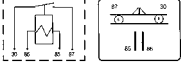
MICRO RELAY

Our Code	Relay	Type	Voltage	Pin	Applications	Connection Board
AVMR025	Normally Open	B	12	4		
AVMR026	Normally Open	A	24	4		
AVMR027	Change Over	B	12	5		
AVMR028	Change Over	A	24	5		
AVMR038	Normally Open	B	12	4		
AVMR039	Normally Open	B	12	4		
AVMR040	Change Over	A	12	5		
AVMR041	Change Over	A	12	5		
AVMR042	Normally Open	B	24	4		
AVMR043	Normally Open	A	24	4		
AVMR044	Change Over	B	24	5		
AVMR045	Change Over	A	24	5		



RELAYS



Our Code	Relay	Type	Voltage	Amp	Information	Connection Board
AVMR001	Normally Open	B	12	40		
AVMR002	Normally Open	B	24	20		
AVMR003	Normally Open	B	12	40	Double Contact	
AVMR004	Normally Open	B	24	20	Double Contact	
AVMR005F	Normally Open	B	12	30	Fused	
AVMR006F	Normally Open	B	24	20	Fused	
AVMR007	Change Over	B	12	40/30		
AVMR008	Change Over	B	24	20/10		
AVMR009	Normally Open	B	12	2x40		
AVMR010	Normally Open	B	24	2x20		
AVMR011	Normally Open	A	12	40		
AVMR012	Normally Open	A	24	20		
AVMR014	Change Over	A	12	40/30		
AVMR014A	Change Over	A	24	20/10		
AVMR015	Normally Open	B	12	50	Heavy Duty	
AVMR016	Normally Open	B	24	40	Heavy Duty	
AVMR017	Normally Open	B	12	70	Heavy Duty	
AVMR018	Change Over	B	12	40/30	with Resistor	
AVMR018A	Change Over	B	24	20/10	with Resistor	
AVMR019	Normally Open		12	200	Heavy Duty	
AVMR020	Normally Open		24	100	Heavy Duty	

RELAYS



Our Code	Relay	Type	Voltage	Amp	Information	Connection Board
AVMR021	Change Over	B	12	40/30	with Diode	
AVMR022	Change Over	B	24	20/10	with Diode	
AVMR023	Normally Open	B	12	40	with Diode	
AVMR024	Normally Open	B	24	20	with Diode	
AVMR030	Normally Open	Splitter	12	60	Double Contact	
AVMR031	Normally Open	B	12	70	Heavy Duty, with Resistor	
AVMR032	Normally Open	B	12	70	Heavy Duty, with Diode	
AVMR033	Change Over	B	12	60/70	Heavy Duty	
AVMR034	Change Over	B	24	30/40	Heavy Duty	
AVMR035	Normally Open	B	12	40	with Resistor	
AVMR036	Normally Open	B	24	20	with Resistor	



"LIGHTS ON" WARNING RELAY

Our Code	Relay	dB	Voltage	Pin	Applications	Connection Board
AVMR037	Normally Open	>85@ 30cm	12	3	Universal	

TIMER RELAYS



Our Code	Relay	Voltage	Delay	On/Off	Connection Board
AVTR001	Timer	12	10 min	On	
AVTR002	Timer	24	10 min	On	
AVTR003	Timer	12	10 min	Off	
AVTR004	Timer	24	10 min	Off	

ADJUSTABLE TIMER RELAYS



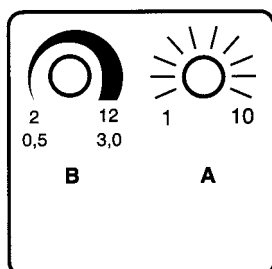
Our Code	Relay	Voltage	On/Off	Connection Board
AVTR005	Timer	12	On/Off	
AVTR006	Timer	24	On/Off	

OPTIONS TABLE

1 = 0,5...	10 second delay off
2 = 5.....	60 second delay off
3 = 0,5...	10 minute delay off
4 = 5.....	60 minute delay off
5 = 0,5...	6 hour delay off
6 = 0,5...	6 hour delay on
7 = 5.....	60 minute delay on
8 = 0,5...	10 minute delay on
9 = 5.....	60 second delay on
10 = 0,5...	10 second delay on

This is an electronic device that operates after a single impulse in the same way as timer relay but the delay is not pre determined, so clients can choose the following options:

- Time Frame: 10 options (A)
- Exact delay within the selected time frame (B)





HEAVY DUTY CONTACTORS



These units are ideally suited to applications where conventional relays are not powerful enough.

A Contactor is an electromagnetic device with an effective working load from 100A to 1000A. It can be installed on fork lifts, construction vehicles, boats, electric power vehicles, industrial vehicles, trains, military vehicles etc.

Technical Advantages

Their primary differences in comparison with traditional high-duty relays are:

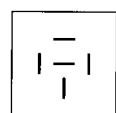
- increased performance
- increased safety and effectiveness
- energy saving
- quicker contact time
- high temperature contacts endurance, that avoids contacts sticking

Our Code	Relay	Voltage	Max Intensity (Amp)	Pins	Connection Board	Technical Diagram
AVC12V100	Normally Open	12	100	4		
AVC12V200	Normally Open	12	200	4		
AVC12V600	Normally Open	12	600	4		
AVC24V100	Normally Open	24	100	4		
AVC24V200	Normally Open	24	200	4		
AVC24V600	Normally Open	24	600	4		
AVC48V50	Normally Open	48	50	4		
AVC48V100/B	Normally Open	48	100	4		
AVC48V200/B	Normally Open	48	200	4		
AVC48V400/B	Normally Open	48	400	4		
AVC48V600/B	Normally Open	48	600	4		

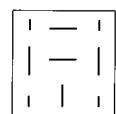
RELAY SOCKETS



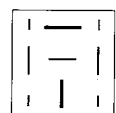
AVRS001 – Inter-locking Base for Relay/Flasher/Timer
Complete with 2 x 6.3mm and 3 x 4.8 Terminals.



AVRS002 – Type of contact: Power Timer
5 x 6.3mm acc ISO 8092-1



AVRS003 – Inter-locking Base for Relay/Flasher/Timer
Complete with 5 x 6.3mm and 4 x 2.8 Terminals.



AVRS004 – Inter-locking Heavy Duty Base for Relay/Flasher/Timers
Complete with 3 x 6.3mm and 4 x 2.8mm & 2 x 9.5mm Terminals

SECTION 12
HORNS



HORNS 1

TRUMPET HORNS 2

NAUTILUS AIR HORN C/W COMPRESSOR 3

HEAVY DUTY EMERGENCY SERVICES HORN..... 4

HORNS



MOTOR CYCLE & SMALL ELECTRICAL VEHICLE

AVH12DHT TK70 **12V**

Low power consumption disc horn ideal for Motorcycles and small electric vehicles.



CAR & TRUCK HORNS

AVH12DHT 12V High Tone Twin Terminal (BLACK)

AVH12DLT 12V Low Tone Twin Terminal (BLACK)

AVH24DHT 24V High Tone Twin Terminal (RED)

AVH24DLT 24V Low Tone Twin Terminal (RED)



FORK TRUCK HI VOLT HORNS

AVH36DHT 30-42V High Tone Twin Terminal (??)

AVH48DLT 40-52V High Tone Twin Terminal (GREEN)

AVH72DHT 70-90V High Tone Twin Terminal (BLUE)



HORN WITH WATERPROOF CONNECTOR

AVH12DHTC **12V** Disc Horn High Tone with Connector

This horn is ideally suited where a waterproof connector is required.



HORNS



SOLID STATE ELECTRONIC HORN

AVH24-48DHTSS 20-58V (YELLOW)

- High Tone Electronic Horn
- Ideal for frequent use
- Long life horn
- Twin Terminal (Yellow)

TRUMPET HORNS



AVH12THS 12V

Trumpet Horn Single Terminal High Tone (BLACK)

AVH12THT 12V

Trumpet Horn Twin Terminal High Tone (BLACK)

AVH12TLS 12V

Trumpet Horn Single Terminal Low Tone (BLACK)

AVH12TLT 12V

Trumpet Horn Twin Terminal Low Tone (BLACK)



AVH24THS 24V

Trumpet Horn Single Terminal High Tone (RED)

AVH24THT 24V

Trumpet Horn Twin Terminal High Tone (RED)

AVH24TLS 24V

Trumpet Horn Single Terminal Low Tone (RED)

AVH24TLT 24V

Trumpet Horn Twin Terminal Low Tone (RED)

HORN VOLTAGE IDENTIFICATION MADE EASY

TERMINAL BLOCK COLOUR	VOLTAGE
BLACK	12 VOLTS
RED	24 VOLTS
BLUE	36 VOLTS
GREEN	48 VOLTS
BLUE	72 VOLTS
YELLOW	ELECTRONIC 24-48V

HORNS



AVHPN2P 12V

- 12V Air Horn Kit
- Twin Tone
- Complete with Compressor & Fitting Kit



AVHPN3P 12V Air Horn Kit

- Triple Tone
- Complete with Compressor & Fitting Kit



AVHPN1P - Self Powered Air Horn

- 110dB
- Ideal for building sites to warn of danger

NAUTILUS AIR HORN C/W COMPRESSOR



AVH12AIR 12V Air Horn

AVH24AIR 24V Air Horn

- 12V or 24V Air Horn with built in Compressor
- 139dB output
- Single bolt fitting
- Complete with Relay



AVHTRMAX12V 12V

Air Electric Horn

Jericho Air Horn

AVHTRMAX24V 24V

Air Electric Horn

Jericho Air Horn



AVHACTC Twin Air Horns Bi-Tonal

- 118dB @ 400mm
- Ideal for Marine / HGV Usage



HORNS



AVHACTC651 AVHACTC701 Single Air Horn Stainless Steel

- 118dB Bronze Diaphragm
- 680 mm (580mm AVHACTC701)
- Complete with Front Baffle



AVHEV12V 12V 12V Electric Solenoid Valve for Air Horns 1000 KPA

AVHEV24V 24V 24V Electric Solenoid Valve for Air Horns 1000 KPA



AVHVP Foot Valve for Stainless Steel Air Horns 1000 KPA



AVHVTIR Hand Valve for Stainless Steel Air Horns 1000 KPA

HEAVY DUTY EMERGENCY SERVICES HORN



AVH2AIRHD This is the original Klaxon type Air Horn unit as used by Fire Brigades for many years.



Spare Parts

AVH2AIRCOMP Compressor

SECTION 13
FUSES



FUSES 1

IN-LINE FUSE HOLDERS 6

BLADE FUSE HOLDERS 7

MAXI, MIDI & MEGA FUSE HOLDERS 8

FUSE BOXES 9

FUSE BOXES & BRIDGES 10

FUSE BOXES & INSULATED HOUSING..... 11

PCB MOUNTED FUSE HOLDERS..... 12

FUSES



LOW PROFILE MINI BLADE (MICRO)



PART NO.	CONTINUOUS RATING	BLOW RATING	COLOUR	PACK QTY
AVMF02	2A	4A	Grey	Card 10
AVMF03	3A	6A	Violet	Card 10
AVMF04	4A	8A	Pink	Card 10
AVMF05	5A	10	Tan	Card 10
AVMF07	7.5A	15A	Brown	Card 10
AVMF10	10A	20A	Red	Card 10
AVMF15	15A	30A	Blue	Card 10
AVMF20	20A	40A	Yellow	Card 10
AVMF25	25A	50A	Clear	Card 10
AVMF30	30A	60A	Green	Card 10

MINI BLADE



PART NO.	CONTINUOUS RATING	BLOW RATING	COLOUR	PACK QTY
AVMBF02	2A	4A	Grey	Box 50
AVMBF03	3A	6A	Violet	Box 50
AVMBF04	4A	8A	Pink	Box 50
AVMBF05	5A	10A	Tan	Box 50
AVMBF07	7.5A	15A	Brown	Box 50
AVMBF10	10A	20A	Red	Box 50
AVMBF15	15A	30A	Blue	Box 50
AVMBF20	20A	40A	Yellow	Box 50
AVMBF25	25A	50A	Clear	Box 50
AVMBF30	30A	60A	Green	Box 50
AVMBF35	35A	70A	Purple	Box 50

STANDARD BLADE



PART NO.	CONTINUOUS RATING	BLOW RATING	COLOUR	PACK QTY
AVBF02	2A	4A	Grey	Box 50
AVBF03	3A	6A	Violet	Box 50
AVBF04	4A	8A	Pink	Box 50
AVBF05	5A	10A	Tan	Box 50
AVBF07	7.5A	15A	Brown	Box 50
AVBF10	10A	20A	Red	Box 50
AVBF15	15A	30A	Blue	Box 50
AVBF20	20A	40A	Yellow	Box 50
AVBF25	25A	50A	Clear	Box 50
AVBF30	30A	60A	Green	Box 50
AVBF35	35A	70A	Purple	Box 50
AVBF40	40A	80A	Amber	Box 50



FUSES

MAXI BLADE



PART NO.	CONTINUOUS RATING	BLOW RATING	COLOUR	PACK QTY
AVMAX20	20A	40A	Yellow	Card 2
AVMAX30	30A	60A	Green	Card 2
AVMAX40	40A	80A	Orange	Card 2
AVMAX50	50A	100A	Red	Card 2
AVMAX60	60A	120A	Blue	Card 2
AVMAX70	70A	140A	Brown	Card 2
AVMAX80	80A	160A	Clear	Card 2
AVMAX100	100A	200A	Violet	Card 2

STRIP



PART NO.	CONTINUOUS RATING	BLOW RATING	PACK QTY
AVSTR30	30A	60A	Card 10
AVSTR40	40A	80A	Card 10
AVSTR50	50A	100A	Card 10
AVSTR60	60A	120A	Card 10
AVSTR80	80A	160A	Card 10
AVSTR110	110A	220A	Card 10
AVSTR150	150A	300A	Card 10
AVSTR175	175A	350A	Card 10

MIDI



PART NO.	CONTINUOUS RATING	BLOW RATING	COLOUR	PACK QTY
AVMIDI30	30A	60A	Amber	Card 1
AVMIDI40	40A	80A	Green	Card 1
AVMIDI50	50A	100A	Red	Card 1
AVMIDI60	60A	120A	Yellow	Card 1
AVMIDI70	70A	140A	Brown	Card 1
AVMIDI80	80A	160A	White	Card 1
AVMIDI100	100A	200A	Blue	Card 1
AVMIDI125	125A	250A	Pink	Card 1
AVMIDI150	150A	300A	Grey	Card 1

MEGA



PART NO.	CONTINUOUS RATING	BLOW RATING	PACK QTY
AVMEGA100	100A	200A	Card 1
AVMEGA125	125A	250A	Card 1
AVMEGA150	150A	300A	Card 1
AVMEGA175	175A	350A	Card 1
AVMEGA200	200A	400A	Card 1
AVMEGA225	225A	450A	Card 1
AVMEGA250	250A	500A	Card 1

FUSES



POWER CAL



PART NO.	CONTINUOUS RATING	BLOW RATING	PACK QTY
AVCAL225	225A	450A	Card 1
AVCAL250	250A	500A	Card 1
AVCAL275	275A	550A	Card 1
AVCAL300	300A	600A	Card 1
AVCAL325	325A	650A	Card 1
AVCAL350	355A	710A	Card 1
AVCAL400	400A	800A	Card 1
AVCAL425	425A	850A	Card 1

CASE FEMALE CARTRIDGE



PART NO.	CONTINUOUS RATING	BLOW RATING	COLOUR	PACK QTY
AVAL14F20	20A	40A	Lt. Blue	Card 1
AVAL14F30	30A	60A	Pink	Card 1
AVAL14F40	40A	80A	Green	Card 1
AVAL14F50	50A	100A	Red	Card 1
AVAL14F60	60A	120A	Yellow	Card 1
AVAL14F70	70A	140A	Brown	Card 1
AVAL14F80	80A	160A	Black	Card 1

PAL TYPE FEMALE



PART NO.	CONTINUOUS RATING	BLOW RATING	COLOUR	PACK QTY
AVAL18F30	30A	60A	Pink	Card 1
AVAL18F40	40A	80A	Green	Card 1

PAL TYPE FEMALE



PART NO.	CONTINUOUS RATING	BLOW RATING	COLOUR	PACK QTY
AVALMCLIP25	25A	50A	Brown	Card 1
AVALMCLIP30	30A	60A	Green	Card 1



FUSES

PAL TYPE FEMALE



PART NO.	CONTINUOUS RATING	BLOW RATING	COLOUR	PACK QTY
AVALCLIP45	45A	90A	Red	Card 1
AVALCLIP65	65A	130A	Black	Card 1
AVALCLIP75	75A	150A	Grey	Card 1

PAL TYPE FEMALE



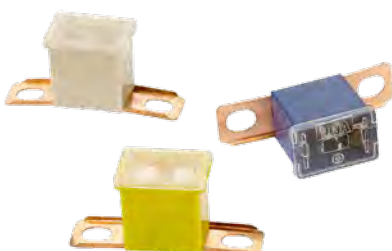
PART NO.	CONTINUOUS RATING	BLOW RATING	COLOUR	PACK QTY
AVAL48F20	20A	40A	Lt. Blue	Card 1
AVAL48F30	30A	60A	Pink	Card 1
AVAL48F40	40A	80A	Green	Card 1
AVAL48F50	50A	100A	Red	Card 1
AVAL48F60	60A	120A	Yellow	Card 1
AVAL48F80	80A	160A	Black	Card 1
AVAL48F100	100A	200A	Blue	Card 1

PAL TYPE MALE



PART NO.	CONTINUOUS RATING	BLOW RATING	COLOUR	PACK QTY
AVALM30	30A	60A	Pink	Card 1
AVALM40	40A	80A	Green	Card 1
AVALM50	50A	100A	Red	Card 1
AVALM60	60A	120A	Yellow	Card 1
AVALM80	80A	160A	Black	Card 1
AVALM100	100A	200A	Blue	Card 1

PAL TYPE MALE - SHORT LEGS



PART NO.	CONTINUOUS RATING	BLOW RATING	COLOUR	PACK QTY
AVAL48M30	30A	60A	Pink	Card 1
AVAL48M40	40A	80A	Green	Card 1
AVAL48M50	50A	100A	Red	Card 1
AVAL48M60	60A	120A	Yellow	Card 1
AVAL48M70	70A	140A	Brown	Card 1
AVAL48M80	80A	160A	Black	Card 1
AVALM100	100A	200A	Blue	Card 1

FUSES



PAL TYPE MALE - LONG LEGS



PART NO.	CONTINUOUS RATING	BLOW RATING	COLOUR	PACK QTY
AVAL62M30	30A	60A	Pink	Card 1
AVAL62M40	40A	80A	Green	Card 1
AVAL62M50	50A	100A	Red	Card 1
AVAL62M60	60A	120A	Yellow	Card 1
AVAL62M80	80A	160A	Black	Card 1
AVAL62M100	100A	200A	Blue	Card 1

CERAMIC



PART NO.	CONTINUOUS RATING	BLOW RATING	COLOUR	PACK QTY
AVCTNL5	5A	10A	Yellow	Box 50
AVCTNL8	8A	16A	White	Box 50
AVCTNL16	16A	32A	Red	Box 50
AVCTNL25	25A	50A	Blue	Box 50

20MM GLASS RADIO



PART NO.	CONTINUOUS RATING	BLOW RATING	PACK QTY
AVGLRAD1	1A	2A	Box 50
AVGLRAD2	2A	4A	Box 50
AVGLRAD3	3.5A	7A	Box 50
AVGLRAD5	5A	10A	Box 50

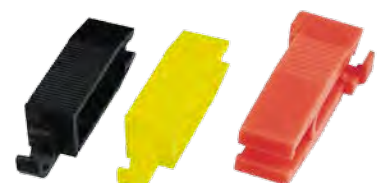
GLASS



PART NO.	CONTINUOUS RATING	BLOW RATING	PACK QTY
AVGL1	1A	2A	Box 50
AVGL2	2A	4A	Box 50
AVGL3	3A	6A	Box 50
AVGL5	5A	10A	Box 50
AVGL8	8A	16A	Box 50
AVGL10	10A	20A	Box 50
AVGL15	15A	30A	Box 50
AVGL20	20A	40A	Box 50
AVGL25	25A	50A	Box 50
AVGL30	30A	60A	Box 50

FUSE PULLER - FOR STD BLADE, MAXI BLADE & 20MM GLASS FUSES

PART NO.	COLOUR	PACK QTY
AVFP001	Black	Card 1
AVFP002	Yellow	Card 1
AVFP003	Red	Card 1





IN-LINE FUSE HOLDERS

(supplied without fuses)

AVFH001R



PART NO.	DESCRIPTION	PACK QTY
AVFH001R	FOR 20MM GLASS FUSES (AVGLRAD)	SINGLE

AVFH001



PART NO.	DESCRIPTION	PACK QTY
AVFH001	FOR STANDARD GLASS FUSES (AVGL)	SINGLE

AVFH002



PART NO.	DESCRIPTION	PACK QTY
AVFH002	IN-LINE MINI BLADE FUSE HOLDER WITH SPLASH-PROOF CAP, MAX 30A	SINGLE

AVFH003



PART NO.	DESCRIPTION	PACK QTY
AVFH003	IN-LINE STD BLADE FUSE HOLDER WITH SPLASHPROOF CAP, MAX 35A	SINGLE

AVFH027

AVFH044 - Extra Heavy Duty



PART NO.	DESCRIPTION	PACK QTY
AVFH027	IN-LINE MAXI BLADE FUSE HOLDER WITH SPLASH-PROOF CAP, MAX 100A	SINGLE
AVFH044	IN-LINE MAXI BLADE FUSE HOLDER WITH SPLASH-PROOF CAP, MAX 100A H/D	SINGLE

AVFH013



PART NO.	DESCRIPTION	PACK QTY
AVFH013	IN-LINE CONTINENTAL FUSE HOLDER (USE AVCTNL FUSE), MAX 25A	SINGLE

AVFH012



PART NO.	DESCRIPTION	PACK QTY
AVFH012	IN-LINE CONTINENTAL FUSE HOLDER (USE AVCTNL FUSES), MAX 30A	SINGLE

BLADE FUSE HOLDERS

(supplied without fuses)



AVFH022



PART NO.	DESCRIPTION	PACK QTY
AVFH022	FOR STANDARD BLADE FUSES 1-35A	PACK 5

Interlockable bakelite fuse holder. For use with standard blade fuses (AVBF).

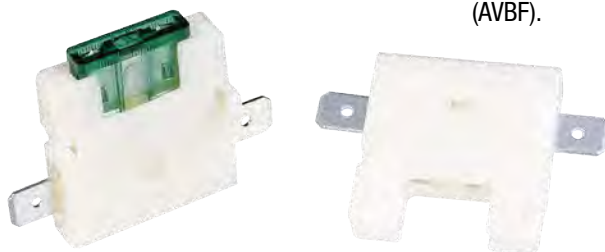
AVFH023



PART NO.	DESCRIPTION	PACK QTY
AVFH023	FOR STANDARD BLADE FUSES 1-35A	SINGLE

6 interlocking bakelite fuse holders with metal bar. For use with AVFH022 fuse holder.

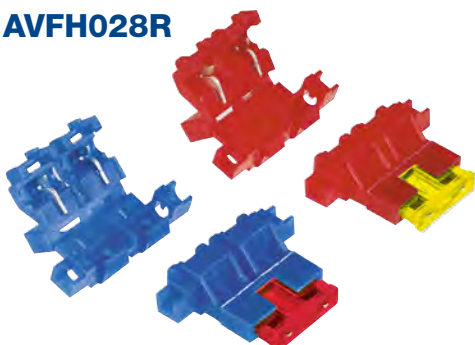
AVFH024



PART NO.	DESCRIPTION	PACK QTY
AVFH024	FOR STANDARD BLADE FUSES 1-35A	PACK 10

Standard nylon blade fuse holder, 6.3mm blade Lucar terminals. Can be interlocked to make a fuse block. For use with standard blade fuses (AVBF).

AVFH028B AVFH028R



PART NO.	DESCRIPTION	COLOUR	PACK QTY
AVFH028B	FOR STANDARD BLADE FUSES 1-15A	BLUE	PACK 10
AVFH028R	FOR STANDARD BLADE FUSES 1-15A	RED	PACK 10

Scotchlok type fuse holder for use with standard blade fuses (AVBF).



MAXI, MIDI & MEGA FUSE HOLDERS

(supplied without fuses)

AVFH030



PART NO.	DESCRIPTION	PACK QTY
AVFH030	MAXI BLADE FUSE HOLDER WITH DUST CAP	SINGLE
AVFH030C	COVER	SINGLE

AVFH031



PART NO.	DESCRIPTION	PACK QTY
AVFH031	MAXI BLADE FUSE HOLDER. CAN BE CLIPPED TOGETHER TO MAKE A FUSE BLOCK	SINGLE
AVFH031C	COVER	SINGLE

AVFH032



PART NO.	DESCRIPTION	PACK QTY
AVFH032	MAXI BLADE FUSE HOLDER	SINGLE
AVFH032C	COVER	SINGLE

AVFH029



PART NO.	DESCRIPTION	PACK QTY
AVFH029	IN-LINE MIDI FUSE HOLDER, M5 STUDS	SINGLE

AVFH021



PART NO.	DESCRIPTION	PACK QTY
AVFH021	IN-LINE STRIP LINK / MIDI FUSE HOLDER, M5 STUDS	SINGLE

AVFH033



PART NO.	DESCRIPTION	PACK QTY
AVFH033	IN-LINE MEGA FUSE HOLDER	SINGLE

AVFH034



PART NO.	DESCRIPTION	PACK QTY
AVFH034	MEGA FUSE HOLDER, M8 STUDS	SINGLE

FUSE BOXES

(supplied without fuses)



AVFH004
AVFH005
AVFH006



PART NO.	DESCRIPTION	DIMENSIONS	PACK QTY
AVFH004	4 WAY STD BLADE FUSE HOLDER	52(W)x85(L)x41(H)	SINGLE
AVFH005	6 WAY STD BLADE FUSE HOLDER	52(W)x115(L)x41(H)	SINGLE
AVFH006	8 WAY STD BLADE FUSE HOLDER	52(W)x154(L)x41(H)	SINGLE

AVFH014
AVFH015



PART NO.	DESCRIPTION	DIMENSIONS	PACK QTY
AVFH014	4 WAY STD BLADE FUSE HOLDER	26(W)x65(L)x58(H)	SINGLE
AVFH015	6 WAY STD BLADE FUSE HOLDER	26(W)x86(L)x58(H)	SINGLE

AVFH017
AVFH018
AVFH019



PART NO.	DESCRIPTION	DIMENSIONS	PACK QTY
AVFH017	8 WAY STD BLADE FUSE HOLDER	45(W)x80(L)x37(H)	SINGLE
AVFH018	6 WAY STD BLADE FUSE HOLDER	45(W)x100(L)x37(H)	SINGLE
AVFH019	4 WAY STD BLADE FUSE HOLDER	45(W)x120(L)x37(H)	SINGLE

AVFH007
AVFH008
AVFH009
AVFH010
AVFH011



PART NO.	DESCRIPTION	DIMENSIONS	PACK QTY
AVFH007	2 WAY CONTINENTAL FUSE HOLDER	45(W)x30(L)x36(H)	SINGLE
AVFH008	4 WAY CONTINENTAL FUSE HOLDER	45(W)x60(L)x36(H)	SINGLE
AVFH009	6 WAY CONTINENTAL FUSE HOLDER	45(W)x91(L)x36(H)	SINGLE
AVFH010	8 WAY CONTINENTAL FUSE HOLDER	45(W)x121(L)x36(H)	SINGLE
AVFH011	12 WAY CONTINENTAL FUSE HOLDER	45(W)x180(L)x36(H)	SINGLE

AVFH016



PART NO.	DESCRIPTION	DIMENSIONS	PACK QTY
AVFH016	8 WAY STD BLADE FUSE HOLDER, THROUGH PANEL MOUNT	32(W)x115(L)x43(H)	SINGLE

AVFH020



PART NO.	DESCRIPTION	DIMENSIONS	PACK QTY
AVFH020	MARINE TYPE STD BLADE FUSE HOLDER WITH COVER & NEGATIVE BUS BAR	94(W)x164(L)x60(H)	SINGLE



FUSE BOXES & BRIDGES

(supplied without fuses)

AVFH25



PART NO.	DESCRIPTION	PACK QTY
AVFH025	4 POLE STRIP LINK / MIDI FUSE HOLDER, M5 STUDS (USE AVMIDI OR AVSTR FUSES) MAX 125A	SINGLE

AVFH26



PART NO.	DESCRIPTION	PACK QTY
AVFH026	2 POLE STRIP LINK / MIDI FUSE HOLDER, M5 STUDS (USE AVMIDI OR AVSTR FUSES) MAX 250A	SINGLE

AVFH27



PART NO.	DESCRIPTION	PACK QTY
AVFH027	2 POLE STRIP LINK / MIDI FUSE HOLDER, M5 STUDS (USE AVMIDI OR AVSTR FUSES) MAX 250A	SINGLE

AVFH025B - Pic 1 AVFH027B - Pic 2



Pic 1



Pic 2

PART NO.	DESCRIPTION	PACK QTY
AVFH025B	1. MIDI JUMPER - FOR USE WITH AVFH025-7	SINGLE
AVFH027B	2. MIDI JUMPER - FOR USE WITH AVFH027	SINGLE

AVFH037



PART NO.	DESCRIPTION	PACK QTY
AVFH037	60MM STRIP FUSE HOLDER (USE AVSTR** FUSE) MAX	SINGLE

AVFH025C / AVFH025C/H



PART NO.	DESCRIPTION	PACK QTY
AVFH025C	COVER - STANDARD PROFILE	SINGLE
AVFH025C/H	COVER - HIGH PROFILE	SINGLE

FUSE BOXES & INSULATED HOUSING

(supplied without fuses)



AVBN01



PART NO.	DESCRIPTION	PACK QTY
AVBN01	BRANCH KNOT CABLES UP TO 25MM ² , M8 STUDS	SINGLE

AVFH038



PART NO.	DESCRIPTION	PACK QTY
AVFH038	16 WAY STANDARD BLADE FUSE HOLDER	SINGLE

AVFH039



PART NO.	DESCRIPTION	PACK QTY
AVFH039	MEGA FUSE HOLDER (USE AVMEGA FUSES) MAX 200A	SINGLE

AVFH040



PART NO.	DESCRIPTION	PACK QTY
AVFH040	POWER CAL FUSE HOLDER (USE AVCAL FUSES) MAX200A	SINGLE

AVFH041



PART NO.	DESCRIPTION	PACK QTY
AVFH041	2 POLE STRIP FUSE HOLDER (USE AVSTR FUSES) MAX 80A	SINGLE

AVFH042



PART NO.	DESCRIPTION	PACK QTY
AVFH042	2 POLE POWER CAL FUSE HOLDER (USE AVCAL FUSES)	SINGLE

AVFH043



PART NO.	DESCRIPTION	PACK QTY
AVFH043	6 POLE MEGA FUSE HOLDER (USE AVMEGA FUSES)	SINGLE



PCB MOUNTED FUSE HOLDERS

AVFPCB01

PART NO.	DESCRIPTION	PACK QTY
AVFPCB01	STD BLADE FUSE HOLDER - PCB	PACK 10



AVFPCB02

PART NO.	DESCRIPTION	PACK QTY
AVFPCB02	STD BLADE FUSE HOLDER - PCB	PACK 10



AVFPCB03

PART NO.	DESCRIPTION	PACK QTY
AVFPCB03	STD BLADE FUSE HOLDER - PCB	PACK 10



AVFPCB04

PART NO.	DESCRIPTION	PACK QTY
AVFPCB04	STD BLADE FUSE HOLDER - PCB	PACK 10



AVFPCB05

PART NO.	DESCRIPTION	PACK QTY
AVFPCB05	STD BLADE FUSE HOLDER - PCB	PACK 10



AVFPCB06

PART NO.	DESCRIPTION	PACK QTY
AVFPCB06	STD BLADE FUSE HOLDER - PCB	PACK 10



AVFPCB07

PART NO.	DESCRIPTION	PACK QTY
AVFPCB07	STD BLADE FUSE HOLDER - PCB	PACK 10



AVFPCB08

PART NO.	DESCRIPTION	PACK QTY
AVFPCB08	STD BLADE FUSE HOLDER - PCB	PACK 10



AVFPCB09



PART NO.	DESCRIPTION	PACK QTY
AVFPCB09	STD BLADE FUSE HOLDER - PCB	PACK 10

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