INSTALLATION & OPERATION INSTRUCTIONS

Model:LV1409

REMOTE ELECTRONIC BRAKE CONTROLLER

Features:

- This is our new generation of brake controller which operates in a pre-set braking force utilising microprocessor technology.
- It is designed for both single and dual axle trailers using a negative earth (ground) system only.
- Rugged and compact, this newly designed brake controller can be easily installed with the simple connection of four wires and comes with a remote control.
- Remote control is simple to install and makes adjusting and monitoring the brakes even easier. Can be located up to a metre from the brake controller.
- This model incorporates an override function for independent braking of the trailer from the vehicle brakes, helping to prevent potentially dangerous swaying and snaking.

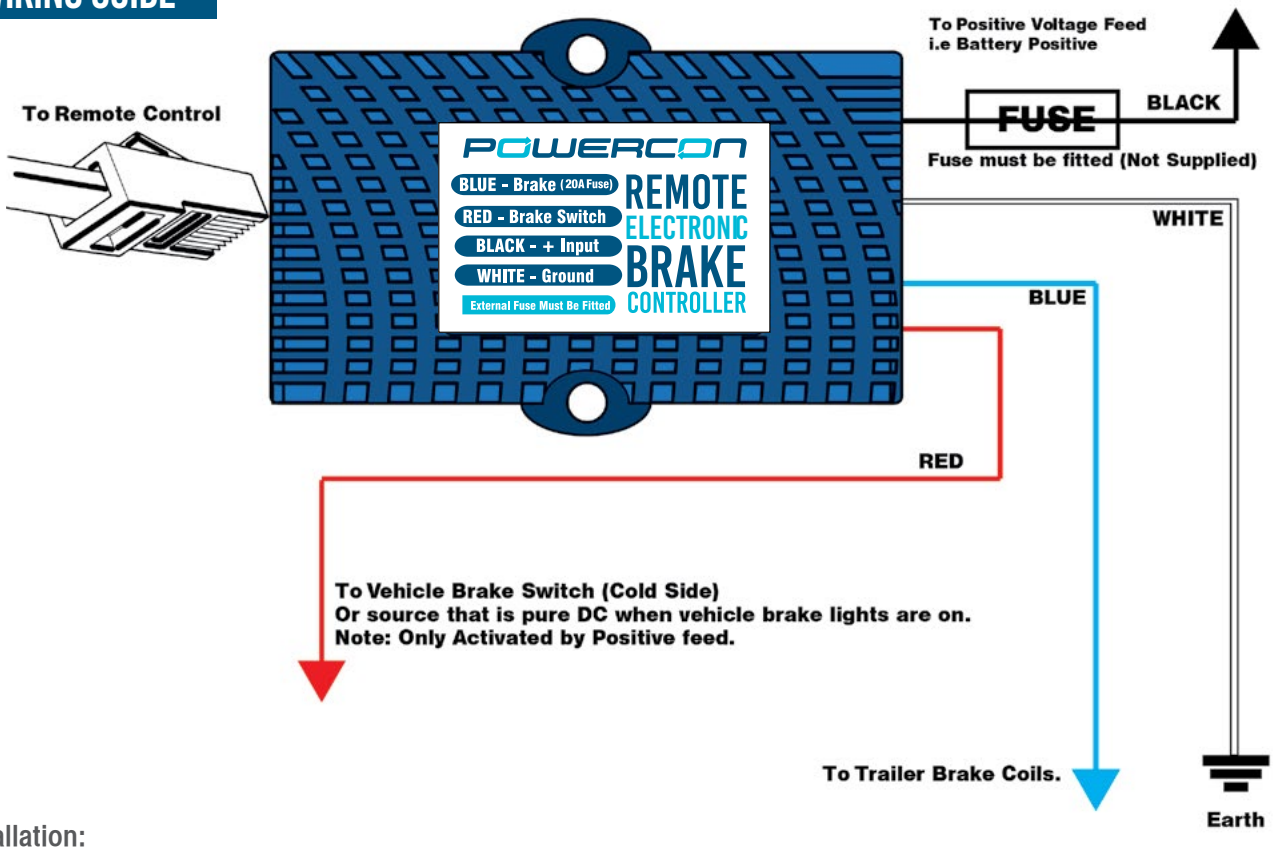
Small, easy mount remote head (20mm x 31mm)

Unlimited mounting angles

Single multi function knob

SPECIFICATION	
Minimum Input Voltage	9V DC
Nominal Input Voltage	12V DC
Maximum Input Voltage	15V DC
Suitable For 12V Trailer Brakes	Yes
No Current Load:	30 mA
Maximum Load:	2 Axle / 12A Avg
Dimensions:	30mm x 57mm x 90mm
Weight:	200g

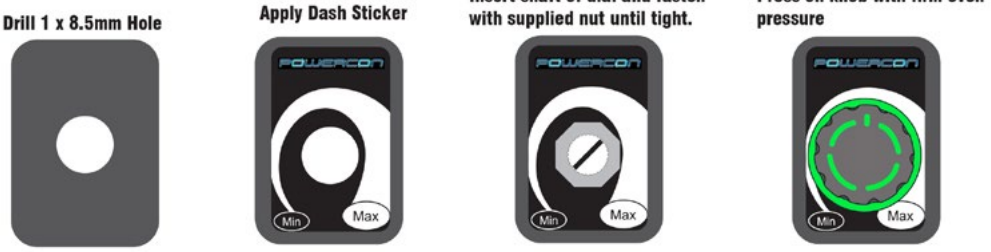
WIRING GUIDE



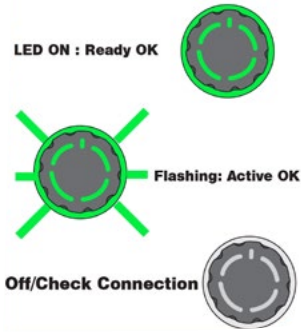
Installation:

1. Disconnect the vehicle's NEGATIVE battery terminal.
2. Determine a suitable mounting location inside the cabin.
3. Hold the main unit in the selected position and mark the hole location through the holes in the flanges of the unit.
4. Using a suitable drill bit, drill holes in the marked locations.
5. Secure Main unit in position with self-tapping screws being careful not to strip the holes by over-tightening.
6. Drill a hole for the 8.5mm Shaft in a suitably sized mounting panel in the dash with a wall thickness of less than 4mm.
7. Affix decal and locking nut over shaft and tighten. Turn shaft fully counter clockwise and affix the knob on the shaft with firm even pressure with the indicator facing the minimum position.
8. Plug the RJ45 connector on remote cable into main unit.
9. Connect brake wiring as per wiring instructions and follow set-up and operation procedures.

INSTALL ON PLATE



LED COLOUR



Wire Guide	
White Wire	Negative Battery
Blue Wire	Brake
Black Wire	Positive Battery Fuse: 12V 20A
Red Wire	Brake Switch

*** Please note: an external fuse must be fitted (not supplied)**

*** The control unit is activated by a positive feed brake switch only.**
(Please check the polarity of your vehicles brake switch before connection)

Please ENSURE THAT A FUSE IS FITTED ON THE BLACK WIRE (POSITIVE BATTERY)
(Optionally a 20A fuse may also be fitted to the BLUE brake wire)

The Brake Controller has four (4) coloured wires, BLACK, RED, BLUE and WHITE:.

The BLACK wire is the positive voltage power supply line.

The RED wire must be connected to a point that receives a DC Voltage equal to that of the supply voltage

when the brakes are on. Generally on most vehicles we recommend strongly to connect the RED wire to the cold side of the brake light switch. If that is not the case on the vehicle then any point that receives a straight DC voltage, i.e. top rear tail light, brake light relay or the wire connecting to the stop lights on the trailer plug

(NOTE: Vehicles that use the same globe/supply for rear and tail cannot have the RED wire to the stop light/tail lights directly. Please use the alternatives listed above.)

The BLUE brake wire must be connected directly to the trailer brake wire.
The WHITE ground wire is connected to a grounded metal part of the dash,vehicle fire wall or directly to the negative battery terminal.

Important: A brake control unit that is not properly grounded may operate intermittently or not at all.
- Make sure all connections are secure.
- Do not connect the Black “BATTERY” wire to the fuse panel or tie into any accessory wiring.
  Connecting to the existing wiring may damage the vehicles wiring and cause trailer brake failure.
- Do not reverse Black “BATTERY” wire and White “GROUND” connections.
  Even a momentary incorrect connection can damage the brake control unit.

In the unlikely event of RF Interference try any of the following tips :
1) Refrain from using the vehicle chassis as a conduit for the earth return for the brake coils. Facilitate a separate ground wire. (See point 3 below)

2) Mount the brake controller route all cables for the input and output of the brake controller away from antennas and RF Equipment.

3) Use an as short as possible bifilar (or twisted) wire to feed the RBC and brake coils (both active and return).

4) Add a ferrite clamp over the RED, BLUE, BLACK & WHITE wires.

SET UP & OPERATION

SETTING THE BRAKING FORCE:

To set the brake intensity, simply rotate the knob until the required braking level is achieved. A clockwise knob rotation will increase the braking and a counter-clockwise will decrease it.

USING THE OVERRIDE FEATURE:

To activate the override function, simply push on the adjustment knob. Releasing the knob disables the function.

NOTE: when the override is active, the braking force is still determined by the knob position

The override function works to apply the tralier brakes without applying the vehicle brakes. This feature can be used when the tow vehicle begins to sway or enter a tail wag situation. Please consult towing professionals or towing training schools for advice on how to use this feature correctly. In the event of an emergency situation, do not rely on the override button for additional braking force.

If additional braking force is required turn the knob clockwise and return your hand to the wheel in a quick and timely manner.

LED Status Indication

LED Indication	Status
	**Trailer connected/ brakes connected/ all systems OK**
	**Either: • Brake pedal pressed, controller actively braking** **• Override has been pressed** Note: Unit will flash 3-4 times after pressing the brake or using the override then return to solid.
	**No power or trailer disconnected from vehicle**

Warranty Conditions: Our products come with guarantees that cannot be excluded under the Australian Consumer Law.

Powercon warrants that its products will, under normal use and service, be free of defects in material and workmanship for a period of two (2) years from the date of the original purchase by the customer as marked on the customer's original invoice.