12V and 24V Remote Brake Controllers

Installation & Operating Instructions Please read these instructions before use



The RBC range is a new generation of brake controllers utilising microprocessor based technology. It is a compact, rugged, all electronic brake controller and is easily installed with the connection of four wires and the mounting bracket supplied. Easily adjustable via the remote control which can be located up to 1m from the controller. Both models also incorporate an over-ride function for manual control. Designed for both single and dual axle trailers using negative earth (ground) systems only. Available in 12V & the new 24V version eliminating the need for a separate reducer on 24V systems.

Features:

- LED remote indication for brake connected and brake on.
- Easy adjustment via knob rotation in remote
- Convenient Over-Ride via knob push in remote
- · Small dashboard mounted remote with 1m cable
- 2 Axle 12A Output Capability
- Top Or bottom Mounting Via The Multi Position Bracket
- · Can Be Mounted On Any Angle
- Compatible with single filament / Brake bulb systems

Product comes with:

- 1x Retaining Nut (On Unit)
- 1x Washer (On Unit)
- 1x LED Plastic Cover
- 1x Control Knob
- 1x Product Sticker
- 2x Mounting Screws

Specifications	RBC-12	RBC-24
Minimum Input Voltage	9 VDC	18 VDC
Nominal Input Voltage	12 VDC	24 VDC
Maximum Input Voltage	15 VDC	30 VDC
Suitable For 12V Trailer Brakes	Yes	Yes
No Current Load	30 mA	
Maximum Load	2 Axle / 12A Avg	
Dimensions	40mm x 79mm x 81mm	
Weight	200g	

Note: The RBC-24 is load activated and can not be tested without load. At no load, output reading of 24V will register. Please note that the output voltage is PULSED, so it cannot be measured with a volt meter or test light.

Installation:

- 1. Disconnect the vehicle's NEGATIVE battery terminal.
- 2. Determine a suitable mounting location. The unit must be mounted securely to a solid surface.
- 3. Hold the mounting bracket in the selected position and mark the hole location through the holes in the bracket.
- 4. Using a suitable drill bit, drill holes in the marked locations.
- 5. Secure bracket in position with self tapping screws being careful not to strip the holes by over-tightening.
- 6. Mount the brake control unit in the bracket by snapping into position.
- 7. Drill two holes in mounting panel to the sticker template and insert control know and LED through holes.
- 8. Fix locking nut over shaft of control and tighten. Insert supplied LED lens over LED.
- 9. Connect brake wiring as per wiring instructions and follow Set-up and Operation procedures over leaf.

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WIRING INSTRUCTIONS		
White Wire	0V DC	
Blue Wire	Brake 15A Fuse*	
Black Wire	+VDC	
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)

Wiring: Please ensure that a fuse is fitted in the Blue Wire (Brake).

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.

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 counterclockwise will decrease it.

LED INDICATION		
LED OFF	Trailer brakes disconnected or no input power to the unit	
LED ON	Trailer brakes connected	
LED Flashing	Brakes on at the selected level, either via brake pedal or Over-Ride function	

Setting the Over-Ride Feature:

To activate the Over-Ride function simply push on the adjustment knob, releasing the knob disables the function. The braking force when the Over-Ride is active is still determined is still determined by the knob position.

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.

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

The customer is entitled to a replacement or refund for a major failure and compensation for any other reasonably foreseeable loss or damage. The customer is also entitled to have the products repaired or replaced if the products fail to be of acceptable quality and the failure does not amount to a major failure.

GSL Electronics (GSL) 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.

Please refer to our website for full warranty and return information which can be found at http://www.gsl.com.au/faq.html

