# ENSURE ALL JOINTS ARE SOLDERED

# **Electrical Specifications**

|                        | Min | Nom | Max | Units |
|------------------------|-----|-----|-----|-------|
| DC Input Voltage       | 12  |     | 32  | Volt  |
| Output Power           |     | 36  |     | Watt  |
| Output Current @ 13.6V |     | 12  |     | Amp   |
| Output Current @ 27.2V |     | 6   |     | Amp   |

**Note:** The unit should always have a fuse in series with the positive (black) wire to protect against over-load and reverse polarity.

# Designed for use on Trailers up to a Maximum Capacity of 2500kg gross laden weight

# MagBrake3 Installation Manual

## For Trailers to be Towed by Various Vehicles

Designed for use on Trailers up to a Maximum Capacity of 2500kg gross laden weight



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Trailer Components | Hub Sets | Brake Systems | Body Hardware | Couplings | Suspensions | LED Lights

<u>WHITE WIRE TO EARTH</u>: Connect white wire to earth on the trailer body. The trailer must have a proper earth extended through the trailer plug to the tow vehicle.

<u>SOFT START OPERATION</u>: Connect Black and Red wires together with a fuse in the line which meets the tow vehicle manufacturer's recommended rating for the tail light circuit. Run these wires to the stop light's terminal in the trailer plug.

<u>BLUE WIRE TO MAGNETS:</u> Extend the blue wire to either wire of the brake magnets. Connect the other magnet wire to earth (white wire) on the MagBrake Controller.

<u>REVERSE MUTE</u>: Connect yellow wire into reverse light terminal of the trailer plug if you require the brakes to be muted when reversing. Ensure the tow vehicle's reverse lights are wired into the reverse pin of the tow vehicle socket. If reverse mute is not required the yellow wire must be earthed (connect to white wire).

#### LED's:

The MagBrake3 is equipped with 2 LED's to assist in testing brake unit operation.

#### Red LED:

Brake signal is active when LED is on. Brakes will be energised and working

#### Green LED:

- S Constant Green LED on indicates that the input power is on and correct voltage
- Flashing Green LED indicates that the input voltage is either too low or too high for correct operation. If flashing you must check input voltage with a meter and correct the reason for error.
- Acceptable input voltage for 12v operation for constant green LED is 12v-16v DC
- Acceptable input voltage for 24v operation for constant green LED is 24v 32v DC
- Any voltage outside these parameters will result in a flashing Green LED and may result in poor brake operation or alternatively the brake unit will go into shut down mode for circuit protection.

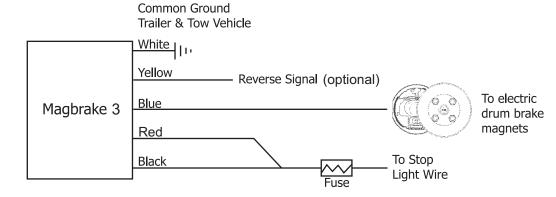
<u>SHORT CIRCUIT & OVERLOAD PROTECTION</u>: The output of the MagBrake3 is protected in 2 ways against short-circuit and overload conditions. If any of these conditions occur, unplug the unit from the vehicle and let the unit cool down if required. After fixing the fault that caused the overload it can be plugged in again.

For example, if it is connected into a short circuit condition, it will not provide power until the short is removed. If connected to a load that requires too much power to drive (ie: too many magnets that are switched on full power for too long), it will trip out on thermal overload. If it trips on thermal overload it will have to cool down and the input power has to be cycled to reset.

NOTE: Reverse polarity connection will result in a unit failure which is easily detectable and the warranty will be void. Please follow the correct installation procedure.

# **ENSURE ALL JOINTS ARE SOLDERED**

### INSTALLATION WHEN TRAILER IS TO BE USED BEHIND VARIOUS VEHICLES



#### WIRING SEQUENCE

Please follow this wiring connection sequence in this order:

- 1st White ground
- 2nd Red/black stop lights
- 3rd Blue magnets

**TESTING POWER OUTPUT:** With each adjustment made to the power output dial the power into the controller must be off and then reapplied. eg. foot off brake, make adjustment then foot on again. The controller will not respond to an adjustment if the power in is left on (foot must be off brake pedal).