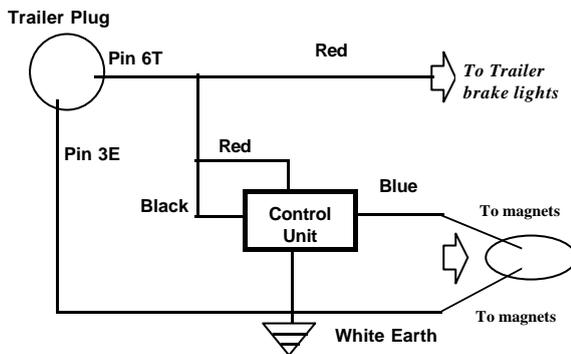


# ATS Electronic Brake Controller

## Model ATS1630 for 2 or 4 wheel brakes.

(When using 24 volt vehicle use BL 24 voltage switch in conjunction with the control unit)

### Installation - Trailer Mounted.



1. Connect **White** wire to (-) negative earth and direct to one side of the magnets in parallel.

2. Connect **Blue** wire direct to magnets in parallel.

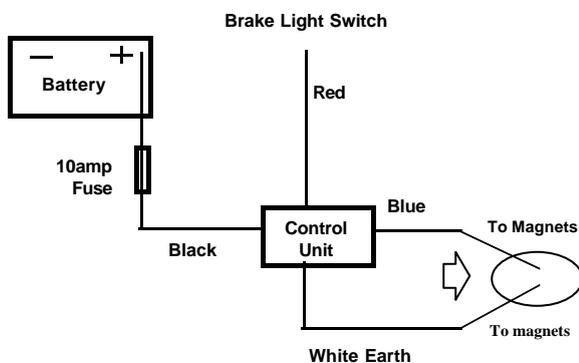
3. Join **Red** and **Black** wires together and connect to the brakes lights.

4. An inline fuse should be installed on the blue wire between the unit and the brakes.

**Mount Unit:** so that it prevents contact with other wires as the unit may become warm with prolonged use. Mount away from direct rain or spray.

**To test:** apply power to the brakes and the 'LED' will light up. As more load is applied the 'LED' will become brighter. When testing, the unit it must be under resistive load (i.e. connected to the trailer's brakes).

### Installation - Vehicle Mounted.



1. Connect **White** wire to (-) negative earth and direct to one side of the magnets in parallel.

2. Connect **Blue** wire direct to brakes via the plug pin 5 and wiring the magnets in parallel.

3. Connect **Red** wire to brake lights. Seek advise with Computer controlled Vehicles.

4. Connect the **Black** wire to the positive side of the battery through a 10amp circuit breaker.

**Mount Unit:** so that it prevents contact with other wires as the unit may become warm with prolonged use.

**To test:** When power is applied to the unit the 'LED' will light up. As more load is applied the 'LED' will become brighter. When testing, the unit, it must be under resistive load (i.e. a trailer with brakes must be connected to the vehicle).

### Disclaimer

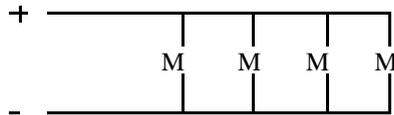
This Electronic Brake Controller ATS1630 is sold on the following conditions.

1. Even though ATS understands this brake controller to be compatible with all brands of electric brakes, it accepts no responsibility for any loss or damage whether directly or indirectly caused to any person or corporation as a result of incompatibility of the unit with the trailer brakes or any other component and it is the responsibility of the purchaser to make all necessary tests and to satisfy themselves of such compatibility prior to installation.
2. ATS accepts no responsibility or liability for any loss or damage suffered by the purchaser or by any person as a result of the incorrect or negligent installation of the unit.
3. ATS its servants, agents and others hereby expressly disclaim all liability to any person or persons or corporation or otherwise whether as a purchaser of the unit or otherwise in relation to any loss damage costs actions or claims of whatsoever nature or howsoever caused as a result of the purchase or use of the unit or otherwise.
4. By the purchase and use of this unit or any such unit from ATS, the purchaser signifies their acceptance of these conditions.

**Warning:** *This unit is a sensitive electronic controller. If the unit is not wired correctly as per the instructions before power is applied, your warranty will be voided.*

## Important Information:

The voltage drop can be notable. From the tow vehicle battery all the way back to the magnets can be 30 foot or more of wiring. It is very important that your power wiring be large enough to compensate for the voltage drop experienced in the system. Use minimum 4mm wire or larger for both the (+) positive wire from the brake controller and the (-) negative wire from the magnets back to the tow vehicle.



Never use the trailer frame or brake cluster backing plate for the (-) brake negative current return. The negative (-) wire must be brought all the way through the trailer plug back to the tow vehicle negative for optimum system performance, or to the controller if mounted on the trailer. Loose connections at the trailer plug, wire taps, and voltage drop from wiring that is too small can radically affect your electric brake system performance. Never use pinch type wire taps for electric brake wiring. They may be adequate for trailer lighting systems, but the high current draw for electric brakes require compression (crimpon) connectors or soldered wire taps for best performance.

**Warning:** Reversal of the black (battery positive) and white (ground earth) will destroy the brake controller. When installing in the vehicle do not ground the white earth wire to the dash or other internal metal surfaces, but return to the negative (-) terminal of the battery via an appropriate circuit breaker.

Standard wiring practices recommend that an appropriate circuit breaker be installed attached to the battery's positive terminal. This will minimize the possibility of an accident due to circuit overload. The black wire should not be attached to the tow vehicle's supply lines or fuse panels.

When paring the wires on the back of the unit be careful not to pull the wires firmly as this may damage the circuit board inside the unit.

Note: Gain level should never be set at a level high enough to cause trailer brakes to lock up. Skidding trailer brakes can cause loss of direction for trailer and tow vehicle. Gain control may need adjusting for different load weights and road conditions.

**Warning:** When installing a breakaway system, reverse connection of the breakaway battery will destroy the brake controller. Likewise, disconnect trailer plug from tow vehicle prior too testing breakaway switch, or you may destroy the brake controller.