

Which Electric Brake Controller should I use?



The most common question consumers ask about caravan brake performance is what type of brake controller should be used. There are two main types of electric brake controller: "Motion Sensing" (Pendulum Type) and "Time Delay".

AL-KO International, as the largest supplier of electric brakes to the caravan and trailer industry, recommends for the majority of caravan towing applications, "Motion Sensing" (Pendulum Type) controllers as they provide proportional balanced caravan braking.

TYPE A

"Motion Sensing" controllers produce caravan braking directly proportional to the tow vehicle's braking. The faster the tow vehicle decelerates, the quicker the caravan's brakes respond. When the tow vehicle decelerates slowly, the caravan brakes are applied at a low level.

This form of brake controller is designed to optimize braking as the tow vehicle's brakes and the caravan's brakes stop the trailer in unison. This type is the most suitable, particularly for caravans that are often traveling long distances and are relatively heavy.

AL-KO International distributes the following motion sensing electric brake controllers:

- Hayes Energize III
- Tekonsha Voyager
- Hayes Endeavour
- Tekonsha Prodigy

TYPE B

"Time Delay" controllers are devices that operate the caravan brakes at a pre-determined braking rate. These controllers are designed to activate the brakes at a set delay from when the stoplights are activated. In some instances the rate of brake application is no different for a gradual stop or an attempted emergency stop.

It is important to note that whilst this device provides some braking, it does not provide the most efficient balanced braking for the combination of car and caravan.

AL-KO International distributes the following time delay brake controller
- Tekonsha Accutrac

Further information can be obtained by contacting AL-KO on
1800 035 603 or by visiting:

www.alko.com.au

AL-KO International Pty Ltd (ABN 96 003 066 813)

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Hayes Energize III



Hayes Endeavour



Tekonsha Voyager



Tekonsha Prodigy



Tekonsha Accutrac

Motion Sensing Controllers

Hayes Energize III®

- Now equipped with “Qwik-Connect” connector, attached to the brake control wiring which makes installation easier.
- The Energize III detects deceleration of the tow vehicle, measures the amount of deceleration and sends a proportional amount of power to the trailer brakes.
- Easily adjustable pendulum leveling system has a visual level indicator to ensure safe easy leveling.
- Automatically monitors and measures tow vehicle deceleration.
- The manual braking slide control lever overrides gain setting for full power emergency braking and activates trailer brake lights for added safety.
- LED indicator light intensifies as braking power increases and warns of short circuits in the system.
- Suitable for 2 or 4 electric brakes.
- Five year warranty.



Hayes Energize III

Hayes Endeavor™

- Now equipped with “Qwik-Connect” connector, attached to the brake control wiring which makes installation easier.
- During braking, the Endeavor’s internal sensor not only detects deceleration of the tow vehicle, it measures the amount of deceleration and sends a proportional amount of power to the trailer brakes.
- Initial voltage and maximum output are adjustable to provide superior brake responsiveness.
- Digital display indicates the amount of power sent to the trailer brakes.
- Displays in three modes: percent of power, voltage or current.
- Visual warning of fault conditions including current limit, short or open circuit, and hazard flash indicator.
- Easy to use manual slide operates independently of the power setting to allow full braking output.
- Suitable for 2, 4, 6 or 8 electric brakes.
- Limited lifetime warranty.



Hayes Endeavour

Tekonsha Voyager™

- Recessed controls protect gain and level settings from accidental readjustment.
- As with other motion sensing controllers during braking, the Voyager’s internal sensor not only detects deceleration of the tow vehicle, it measures the amount of deceleration and sends a proportional amount of power to the trailer brakes.
- Ergonomically designed control lever for easy, accurate application of manual braking power.
- Advanced circuitry minimizes interference with other vital electronic systems, such as ABS, cruise control, EFI or overdrive systems.
- The traditional 4 wire hook up and under dash U bracket assure secure and permanent installation.
- Broad control range makes setting quick and easy.
- The green LED display means the unit is on and that there is a complete circuit with the trailer brakes.
- As manual or automatic braking power is applied, the LED changes colour, gradually illuminates from green to red to indicate relative braking power.
- Suitable for 2 or 4 electric brakes.
- 3 year limited warranty.



Tekonsha Voyager

Tekonsha Prodigy™

- No manual level adjustment is necessary, it adjusts itself to varying terrains as you drive.
- Is equipped with a sensor that detects the tow vehicle’s rate of deceleration, applies proportional braking to the trailer and features an exclusive “Boost” feature that gives users the ability to apply more initial trailer braking power.
- Digital display depicts voltage delivery to the trailer during braking and displays continual diagnostics check for proper connection, shorted magnet condition, open ground and much more.
- Suitable for 2,4, 6 or 8 electric brakes
- Limited lifetime warranty.



Tekonsha Prodigy

Time Delay Controllers

AccuTrac®

- Is especially suited for constantly changing load conditions.
- The dual action slide controls allows customized stopping power both in town and on the highway.
- Positive LED indicator confirms brake connection.
- Easy to reach manual over-ride control.
- Suitable for 2 or 4 electric brakes.
- 5 year warranty.



Tekonsha Accutrak