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Through  
Innovation*

## TVG EcoLimit

### Speed Control & Eco Driving System

#### Product Guide

Document ID: G0054 - EcoLimit

Read guide fully before commencing installation.  
This guide must be present during time of install.  
This guide is to be used in conjunction with training.

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## TVG EcoLimit

TVG EcoLimit has been designed to improve vehicle safety and economy by controlling vehicle speed and acceleration. It works in both forward and reverse gears, and on both ICE vehicles and EVs.

## Speed Control & Eco Driving Systems

In today's fast-paced world, ensuring road safety and adhering to regulations is paramount. A vehicle speed and acceleration limiter is a crucial technology designed to enhance safety, comply with regulatory standards, improve economic efficiency, and reduce environmental impact.

**Safety:** By limiting the speed and acceleration of vehicles, this technology significantly reduces the risk of accidents. It ensures that drivers maintain safe speeds, especially in high-risk areas such as vehicle depots, customer sites and residential neighbourhoods. This proactive approach to safety can save lives and prevent injuries.

**Regulations:** Many countries have stringent regulations regarding vehicle speeds and emissions. A speed and acceleration limiter helps vehicles comply with these laws, avoiding hefty fines and legal issues. It ensures that vehicles operate within the legal speed limits, contributing to safer roads and better traffic management.

**Economy:** Limiting speed and acceleration can lead to substantial economic benefits. It reduces fuel consumption, leading to lower operational costs for vehicle owners and fleet operators. Additionally, it minimises wear and tear on vehicles, extending their lifespan and reducing maintenance expenses.

**Environmental Impact:** Speed and acceleration limiters play a vital role in reducing the environmental footprint of vehicles. By optimising fuel usage and minimising aggressive driving behaviours, they contribute to lower emissions of greenhouse gases and pollutants. This technology supports global efforts to combat climate change and promotes a cleaner, healthier environment.

## TVG EcoLimit - ICE & EV

### EcoLimit - ICE Vehicles

Driving behaviour can influence fuel efficiency by up to 35%. With EcoLimit, fleets can save fuel, reduce maintenance costs, and lower CO2 emissions.

**Excessive Speed:** Higher speeds lead to increased fuel consumption and are a leading cause of RTAs and vehicle damage.. The EcoLimit Speed Limiter helps maintain optimal speeds, reducing the potential of RTAs, fuel costs and emissions.

**Aggressive Acceleration:** Rapid acceleration wastes fuel and increases wear to key components. The EcoLimit RPM Limiter ensures controlled power delivery, minimising fuel usage and engine strain.

**Smooth Acceleration:** Gentle acceleration improves efficiency, reduces gear strain, and prevents excessive turbo activation, resulting in:

- Lower Fuel Consumption
- Reduced Engine Wear
- Extended Tyre Life

### EcoLimit - EVs

Driving behaviour significantly impacts EV range. With EcoLimit, fleets can maximise battery efficiency, reduce maintenance costs, and extend vehicle lifespan.

**Excessive Speed:** High speeds drain battery life. The EcoLimit Speed Limiter enhances range by preventing inefficient high-speed driving.

**Rapid Acceleration:** Quick acceleration strains the drivetrain. The EcoLimit Acceleration Limiter ensures smooth power delivery, extending motor life and minimizing energy waste.

**Controlled Acceleration:** Gentle acceleration reduces battery stress and prevents excessive torque, leading to:

- Longer Battery Range
- Less Wear and Tear
- Extended Tyre Life

## TVG EcoLimit - Additional Features

Along with the safety, economy and environmental benefits on the previous page, EcoLimit also has the following additional features:

**Speed Control Zones:** EcoLimit can use geofencing to identify when a vehicle is entering a speed controlled area (such as a depot, or delivery site) and limit the vehicle speed to the site limit, or a safe speed as desired.

**Speed Limit Enforcement:** Using GPS and sophisticated mapping software, TVG EcoLimit can detect when the vehicle enters an area with a change of speed limit, and then restrict throttle pedal input to restrict vehicle speed.

**Reverse Collision Mitigation:** Not only can the system limit the speed at which the vehicle can reverse, it can also be triggered by a parking sensor to cut the throttle input completely, potentially avoiding an accident.

**Emergency Vehicle Speed Control:** The system can be configured to limit the speed of emergency service vehicles unless operated by an authorised driver.

**EV Range Extender:** While most EVs can limit speed when the battery reaches a certain percent of charge, this figure is usually very low. Our system can be configured to reduce throttle input at a chosen battery percentage and increase the remaining range of the vehicle by implementing an Eco driving setting.

**EV Torque Limiting:** Aggressive acceleration can dramatically reduce the life of tyres and can cause premature wear to the drive battery, as well as significantly reducing the battery range. By limiting the amount of power available to the driver we can ensure smooth acceleration to improve component life and battery range.

**Immobilisation / Authorised Driver:** The system can be used to immobilise a multi use vehicle. The vehicle speed can be limited to only a few miles an hour unless an authorised driver presents their tag/card to a reader. This would allow the vehicle to be moved by any driver in an emergency situation, but not driven normally.