



Transform Your Entire Fleet With Engine Calibration Software

Reduce your fleet's fuel consumption and carbon footprint in 30 minutes or less.

Building The Fleet You Need

Vehicles are mass-produced to function for a wide variety of potential buyers and uses. Fleets, on the other hand, are not one-size-fits-all. Fleet vehicles are used to accomplish an array of tasks that can vary from fleet to fleet and even from project to project. When fleet vehicles are purchased, companies will likely make specific alterations to make the vehicle conducive to its required use. All elements are important, from adding ladder racks to GPS systems to custom paint jobs and wraps, but the most vital customization is often overlooked – the engine.

Engine calibrations are a way to customize the vehicles in your fleet to make them work in the most effective way possible. By altering the vehicle's engine parameters to align with the way the vehicle is being used, you can minimize fuel costs, increase driver safety, and elevate overall fleet productivity. Engine calibrations can also elevate telematics, allowing fleet managers to access performance data and proactively respond as needs change.

Meet VQ Efficiency™

VQ Efficiency™ is Derive's engine optimization software solution for engine calibrating. With over 2 million software installations, VQ Efficiency™ has transformed fleet performance from one-size-fits-all to empowering fleets to increase vehicle productivity by optimizing how they perform.

FUEL COST SAVINGS

After implementing engine calibrations, most fleets experience a fuel cost savings of 6-12% [Source](#)

12%





Why Engine Calibration Is Not On Fleet Managers' Radar

Engine calibration is such a simple and effective way to transform the profitability of a fleet. In fact, engine calibration has been performed on millions of vehicles over the last 20 years to enhance performance - yet it is still a rarely used tool by fleet managers and operators. The idea that you can plug a device into the OBD-II port of the vehicle and adjust the engine parameters to align with the needs of that vehicle seems too good to be true. It's not too good to be true – it's engine calibration.

You have the power to customize your fleet by modifying each vehicle's engine parameters in 30 minutes or less. The result. Improved fuel efficiency. Improved safety. Optimized Telematics. Leveraging calibrations is the simplest and most effective way to improve fuel efficiency, decrease fuel costs, and limit dangerous driver behavior.

If you need to add power, engine calibrations can unlock more horsepower and torque. If you need a more responsive throttle, calibrations can adjust the throttle sensitivity for stock, fuel saver, performance, or extreme modes. If you need to modify transmission shifting, you can use calibration to change the vehicle's shift points and firmness.

Your fleet is just one simple step away from improving vehicle performance and maximizing fuel efficiency.

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How VQ Efficiency™ Works

Engine calibration is the process of adjusting a vehicle's Engine Control Module (ECM) by implementing customizations to the software coding that tells the engine how to run. These coding modifications refine engine parameters to tailor vehicle performance to a fleet's specific use. Using VQ Efficiency™, Derive installs the customized software calibrations into a handheld programmer that is then plugged into a vehicle's OBD-II port. The programmer then optimizes the engine control module settings with Derive's proprietary software in order to implement the calibration.

What You Can Expect

The Derive team conducts a 3-step approach to tailor vehicle performance to your fleet's specific mission:

- › **Analyze** – Derive's experts will identify and calculate all the factors that contribute to your vehicle's performance and fuel usage and set goals for improving them.
- › **Program** – Derive will load your customized device, or tuner, that will be installed into your engine's computer.
- › **Optimize** – The tuner will optimize your vehicle's calibration settings (such as idle RPM and shift points).

The Benefits

Implementing vehicle calibrations will improve fuel efficiency, enhance vehicle safety, and improve fleet productivity. Don't just take our word for it – the next page explains how some of Derive's customers have used VQ Efficiency™ to transform their entire fleet and company's bottom line.

Calibration vs. Tuning

While engine calibration may be a less common term in fleet management, engine-tuning is more widely known. These two terms can be used interchangeably. Both engine calibration and engine-tuning refer to the process of modifying a vehicle's engine parameters to increase the performance of the vehicles.



COMCAST REDUCED FUEL COSTS BY \$8.2 MILLION

As the 5th largest commercial fleet in the nation, Comcast was looking to find a way to make their thousands of daily service calls more fuel-efficient. After a thorough analysis, Derive used VQ Efficiency™ to optimize idle RPM, implement a speed governor, tailor shifting points, and manage torque settings.

LOENBRO CONDUCTED A CALIBRATION TEST THAT RESULTED IN A 7%-8% FUEL SAVINGS

Loenbro, a construction and oilfield/energy services corporation, was trying to reduce operating costs and deliver safe operations. Derive helped Loenbro conduct an experiment with VQ Efficiency™ by calibrating a vehicle with a V6 and a vehicle with a V8 to align with their actual use rather than factory standards. After two months, the results were:

- 7% fuel savings in the V6
- 8% fuel savings in the V8



FLORIDA POLICE DEPARTMENT SAVED \$140,000 IN ANNUAL FUEL COSTS

The Port St. Lucie's Police Department vehicles experienced a significantly higher-than-average idle percentage during each 12-hour shift. Derive used VQ Efficiency™ to implement customized calibrations to adjust idle RPM and shift points to reduce each vehicle's idling from 76% to 64%.



Use Data to Elevate Productivity

The effectiveness of calibration solutions makes them the single most efficient step fleet managers can take to improve the performance of their fleet. We make your telematics solution better by combining the fuel savings benefits of VQ Efficiency with the proven visibility and insights you expect from telematics, all in one UX dashboard. Our fully integrated solution allows fleet managers to customize vehicles with automated idle management, eco adjustments, and speed governing, while receiving full transparency into fleet operations.

Idle Reduction Management

Idling is one of the worst fuel-wasting activities for a fleet, wasting as much as 0.25-0.50 gallons/hour (depending on the size of the engine). Implementing Idle Reduction Management significantly reduces these costs by relying on the vehicle to manage idling rather than the driver.

Eco Adjustment

An important benefit of the vehicle optimization approach is fleets' ability to "green" their operations with more certainty than under the driver-centric plan. Adjusting the parameters of a vehicle's engine to minimize fuel waste during vehicle acceleration

reduces redline shifting and engine wear-and-tear. Drivers will experience a smoother driving experience and fleet managers will no longer have to modify driver's acceleration throttle response control.

Speed Governor

Unsafe speed management puts safety at risk for drivers as well as the community. It can also have significant financial ramifications for fleets. Speed governing can restrict maximum speed to the limit mandated by a fleet's policy. By relying on the vehicle to manage speed, drivers are not put in a position where their driving habits can affect their safety and other passengers on the road or the vehicle's efficiency.

As an expert in custom vehicle calibrations, Derive Systems has tuned more than 2 million vehicles with VQ Efficiency™. If you are ready to transform your entire fleet with calibration, [contact us today.](#)

DERIVE

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