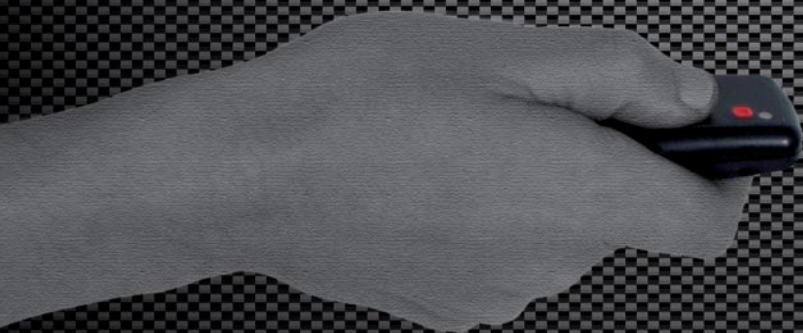


# SELECT-A-MAP

Diesel Control ECU

## Performance, Economy, Choice

Control the performance of your vehicle via five  
instantly switchable maps using a remote key fob:



- 1 Standard Map
- 2 Economy Map
- 3 Fast Road Map
- 4 Very Fast Road Map
- 5 Reduced Power Map

CUSTOMER BROCHURE

## Advanced Features

Using the same principal as a professional ECU re-map to create a mirror image of the vehicles own ECU fuel map, the SELECT-A-MAP creates 5 different maps that are instantly switchable by the remote key fob with the ignition on or engine at idle.

1

### Standard Map

Standard torque and standard power.

2

### Economy Map

Increased torque and standard BHP to enable optimum economy – Can be refined to operator's specific requirements.

3

### Fast Road Map

Increased torque and increased BHP for everyday driving, while retaining good driveability and improved economy, with no adverse effect on DPF.

4

### Very Fast Road Map

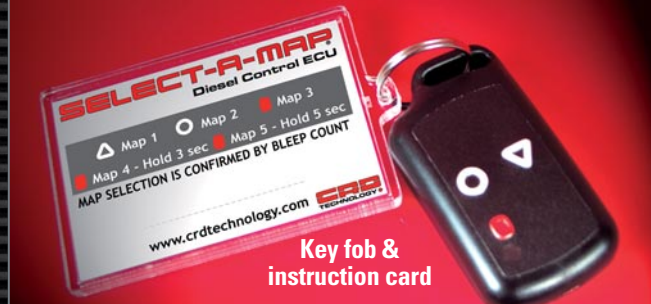
Tuned to give the highest Torque and highest Power for occasional fast road or track day use.

**Note:** Prolonged use of this map could result in more frequent DPF regeneration and, since it provides uncompromising levels of performance, fuel consumption will likely increase.

5

### Reduced Power Map

Low Power or 'Valet' option enables already powerful cars to be used by less experienced drivers.



Key fob & instruction card

Any of the predefined maps can be used as is or, as an optional extra service, the installer can further refine any map\* to suit individual requirements.

No single map is right for every purpose. Vehicle manufacturers are forced to compromise by producing a map that meets emission regulations while providing acceptable economy and performance.

ECU re-map specialists experience similar problems when working with a single map; improvements can be made in some areas but never in all areas.

By offering 5 customised, instantly switchable maps, it is possible to provide an uncompromising solution that can be tailored to suit any purpose and every customer.

Some re-mapping companies offer customers an optional OBD handset that allows switching between 2 maps, but this procedure can take several minutes to perform and carries a risk that a data error could render the vehicle's ECU inoperable.

A specific map can be selected as the default map to revert to at power-up/ignition-on. For example, it may be preferable to always start the vehicle with a standard/100% map or, for added security, a reduced-power or 'valet mode' map. **Note:** One exception to this is Map 5 which, when selected, remains selected, regardless of any default map settings or ignition status, until a different map selection is made.

*\* Additional mapping costs may be charged.*

## Diesel Particulate Filter (DPF) Friendly

Many modern cars are vulnerable to DPF blockage as a result of the type of use and driving conditions experienced.

For example, if it is used mainly in slow moving short journey commuting or similar circumstances, where the engine is never subjected to driving conditions that are necessary to ensure effective DPF regeneration.

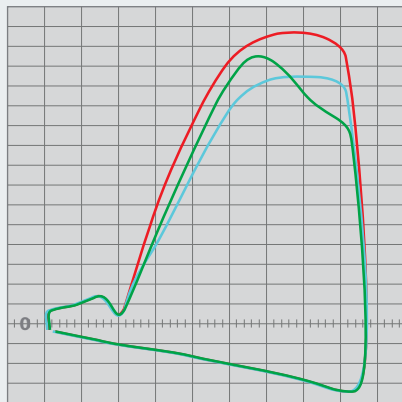
This inevitably leads to frequent trips to the dealer for forced regeneration, which may be a chargeable job, but at best is an inconvenience.

The SELECT-A-MAP ECU reduces the risk of DPF problems by allowing any increase in fuel to be governed by engine speed and load.

Another unique option that is only available with this unit, is to have one of the 5 maps produced to specifically address the driving conditions the car is normally used in by reducing the fuelling, yet retaining the option to instantly switch to the standard map or, indeed one of the enhanced performance maps, to suit whatever conditions are being experienced at the time.

### DPF Removal

An additional plug-in emulation module is also available for use with the SELECT-A-MAP. This will appease the engine management system of most vehicles and prevent them from going into limp mode, if the DPF were to be removed.



## Rolling Road plot showing diesel mapping capability

**High Torque & Higher BHP**

**High Torque & Lower BHP**

**Standard Torque and BHP**

The SELECT-A-MAP ECU offers the driver a choice of maps that can be switched in an instant, allowing power to be increased only when needed, therefore reducing fuel consumption and further reducing any risk of DPF problems.



**SELECT-A-MAP Diesel Control ECU**



# SELECT-A-MAP: The World's most advanced D

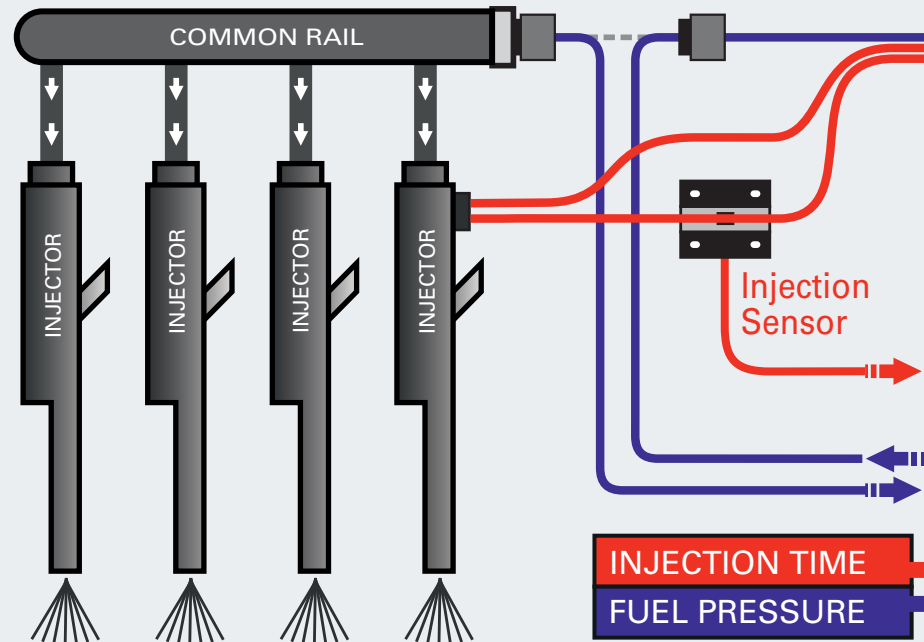
**The SELECT-A-MAP Diesel Control ECU is a new generation, diesel control computer that is undoubtedly the most sophisticated and advanced tuning product available anywhere.**

## **A complete fuel remap with all the convenience of a tuning box**

The SELECT-A-MAP ECU is quite simply a revolution in vehicle remapping. It combines most of the benefits of a conventional ECU remap with the ease of installation of a diesel tuning box. It is designed to be highly universal, making it compatible with most common rail diesel engines and it contains a host of other features not found in any other product.

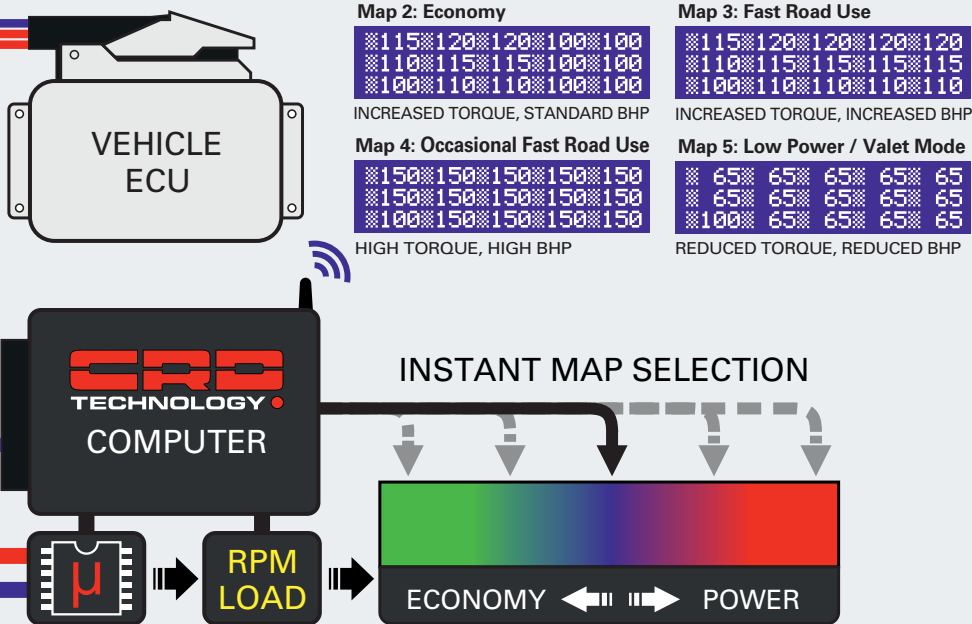
## **The only non-intrusive remapping solution**

Using patented technology, developed in the UK by the fuel injection experts at CRD Technology, the SELECT-A-MAP ECU allows your vehicle to be remapped without cutting wires or making any modification to your vehicle's ECU. This not only makes for a quicker installation time, but also makes transferring to another vehicle possible and reduces the risk of invalidating your vehicle's warranty.



# Diesel Performance Computer (not a tuning box)

It packs in features and benefits never previously seen, while working in complete harmony with the vehicles own engine management control unit (ECU).

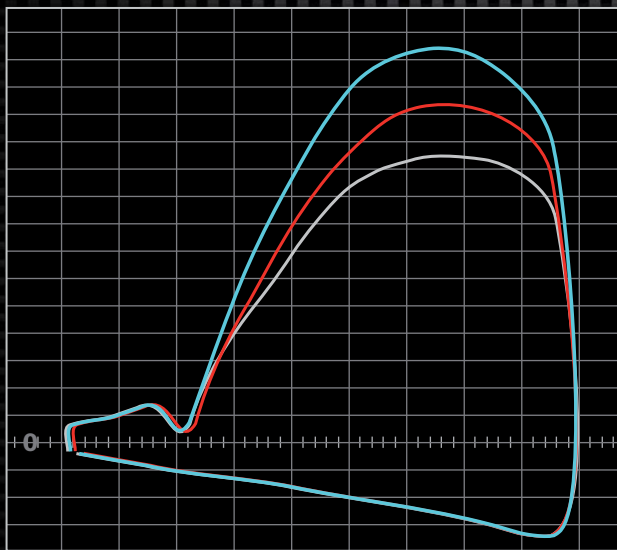


## Power, speed and accuracy

To maintain engine efficiency and reduce the risk of Diesel Particulate Filter blockage, it is imperative that any modifications to the quantity of fuel injected are precisely metered and timed. The SELECT-A-MAP ECU achieves this by accurately monitoring fuel rail pressure as well as injector opening times, using a unique, non-intrusive injector sensing method. It performs many millions of calculations per second, enabling it to compute engine speed and load values instantly so that the exact quantity of fuel required is always injected at exactly the right moment.

## Dealer Handset





Standard Diesel Power

High Diesel Power

High Diesel Power with Nitrous Oxide

## Nitrous Oxide (NOS)

For the ultimate in track day performance that no ECU re-map or Tuning Box can offer. Using the SELECT-A-MAP optional solenoid driver interface, it becomes possible to 'map' the Nitrous giving precise control of the solenoid and supplying the correct quantity of Nitrous without waste.

When using Nitrous in petrol engines a lean mixture can cause damage

through detonation but diesel engines run lean most of the time, so are not affected in the same way.

Nitrous has a cooling effect and it's high oxygen content results in a more efficient diesel burn rate that produces more power.

A fast road map will typically take a standard 160bhp engine to 190bhp but by selecting the very fast road map and using it with Nitrous 220bhp is safely achieved.

When the Nitrous switch is armed the SELECT-A-MAP automatically engages the excessively rich Nitrous map and when disarmed it reverts back to the previous selected map.

## Diesel-Blend - LPG/CNG

Another cost saving option for fleet operators and high mileage diesel users is to run their vehicles on a cheaper fuel blend.

The SELECT-A-MAP ECU was also developed to enable common rail diesel engines to run on a blend of at least 2 fuels, the most common being Liquid Propane Gas (LPG) or Compressed Natural Gas (CNG). It is compatible with most existing makes of LPG or CNG liquid and vapour systems that are designed to operate with multipoint petrol injection vehicles when used in diesel blend applications.

LPG substitution ratios of up to 40% are normal whilst using CNG ratios of above 50% can be substituted on much lower price fuel giving savings of typically between 10-25%.

The SELECT-A-MAP Diesel Blend ECU has many features and benefits not previously available including a choice of maps to suit the type of secondary fuel being used (LPG or CNG) and different operator requirements. Precise control of each fuel via two separate maps allows the perfect mixture to be achieved without any increase or decrease in overall engine power.

## Fleet Operator Savings

The SELECT-A-MAP diesel control unit will be of particular interest to fleet users as a simple way of reducing their ever increasing fuel costs. The unit is easily installed and all electronic fuel adjustments remain within the manufacturer's original engine management system tolerances.

The tachometer 'Green Band' represents the manufacturer's optimum engine speed range for both economy and torque.

Operators encourage their drivers to stay within this speed range to save fuel. However, drivers often make excessive use of the 'Red Zone' and waste fuel.

Driver trainers are often used to promote sensible driving within the green band, but after a while, in most cases drivers tend to revert to their normal driving style.

The SELECT-A-MAP can be programmed to not only increase torque in the green band but also to limit fuelling in the red zone which encourages a change of driving habits, with earlier gear changes that keep the engine within the green band, resulting in significant fuel savings.

Units can also be individually mapped to suit the operator's particular requirements.

### Acceleration Control Feature

An additional, unique feature is Acceleration Control that can be used on its own with a standard map or in combination with a fuel modification map.

It provides a simple method of controlling performance based on engine acceleration rate, allowing acceleration to be limited without reducing torque at slowly increasing or constant engine speeds.

The SELECT-A-MAP positively encourages drivers not to accelerate



rapidly and to ensure they stay within the green band, resulting in fuel savings and greater vehicle life.

The SELECT-A-MAP is a universal product that can also be used in many common rail diesel engine applications with custom mapping facility for agricultural, marine use etc.

### **Vehicle warranty intact**

The SELECT-A-MAP ECU does not make any changes to the vehicle's ECU and can be removed or refitted in minutes. Once removed, its use cannot be detected by manufacturer or dealer equipment and it is unaffected by ECU updates ('re-flashing').

### **ECU tampering avoided**

An increasing number of vehicle ECUs now employ a software 'lock', commonly referred to as 'Tuner Protection', making it impossible to remap such an ECU without first disassembling it to gain access to the relevant chip. Even if access to the chip is successful, there is no guarantee that it can be reprogrammed. The SELECT-A-MAP ECU's unique, patented remapping technology address all of these issues, providing most of the advantages of ECU reprogramming (plus many more features!) without any of the associated disadvantages.

### **Universal application**

The SELECT-A-MAP ECU is suitable for use on most common rail diesel engines, as fitted to cars, LCV's, Trucks, Mobile Homes, agricultural vehicles and other CRD applications. It can even be used with vehicles ECUs that have already been re-mapped to alter and further improve the performance, especially where torque and fuelling parameters have been widened.

### **Improved fuel economy**

The SELECT-A-MAP ECU's powerful mapping technology allows maps to be easily created not only to improve vehicle performance but also maps that can improve economy or even reduce performance.

Although we do not publish BHP figures, the SELECT-A-MAP ECU is guaranteed to produce fuel savings and power gains at least as good as the very best tuning boxes available today but with greater flexibility and the potential to out-perform any other diesel tuning product.

### **Cost**

The SELECT-A-MAP delivers all these features and benefits for only a little more than the cost of a quality re-map and is available through a Nationwide network of specialist dealers. See Website for details.

## **Contact us**

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Global Patents Pending

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Dealer Stamp:

