Wholesale FAQs

How is the box applied to a new project?

Not all engine management systems have all the same sensors, or the same ways of using the information from them. Finding the best combination of changes requires a certain amount of experimentation.

A sample vehicle is required to develop the basic box for the specific application, which includes finding the best way of connecting to the original equipment. Once this has been done, a couple of sample boxes are supplied so they can be tested on other vehicles. Assistance and advice is given in sourcing and using suitable parts for manufacturing wiring looms.

When the application has been proved, the boxes are supplied in wholesale quantities. Optional extras are available to compliment the boxes, although Haslemere Tuning Ltd does not supply the wiring looms. These are part of what the distributor uses to make the product their own, along with tuning files and any branding.

How is the Versatile Tuning Box mapped?

The boxes are tuned using a laptop or PDA. The software is supplied free, although the lead required is chargeable.

Tuning files are the property of the distributing tuning company, and are protected by a password unique to them. Other companies using the same equipment will not be able to upload somebody else's hard-won secrets!

When the boxes are sold to the retail customer, the tuning company will need to download the specific tuning file for the customer's application. This can be done using the same tuning software, with the box temporarily powered from a car battery or a bench power supply.

The tuning file also sets the characteristics of the box for the application - for example the difference between the boxes for a VW 1.9TDi PD and a BMW Mini One D will simply be the tuning file and the connecting wiring loom.

What if the box doesn't work with my target vehicles?

Unless the box is specifically listed for your target vehicle, we will assume that some work needs to be done to apply it. Many of the functions on the box will work with systems on a new car; others will require varying degrees of development to work.

It's not a problem because it's what we expect! The development work required to apply the box is done in association with the distributor - they will need access to the target vehicles so that the box can be developed. These new applications can either be added into the general list of vehicles covered by the project, or they can be made specific to that distributor.

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Can any specific vehicle model be used by any distributor?

Yes and no. There are vehicles on a 'general' list which can be used by any distributor. These have been developed and tested for this purpose. If a new application has to be developed for the Versatile Tuning Box, the only requirement is a commitment to buy a quantity of boxes to justify the time spent.

However, if it is important to you that development for a particular application is unique to you, that's fine too. The difference is that the development time will have to be paid for, as a project. You may also like to consider commissioning hardware specifically for your application.

Are the tuning files protected from prying eyes?

There are two passwords in every Versatile Tuning Box. One is allocated to the distributor, and the other is based on the ESN (electronic serial number) programmed into every box. No distributor can access the tuning files of another.

The second password can be released to the customer, at the discretion of the distributor. There are limited functions available for the customer to adjust, with the extremes set by the distributor. The distributor password has a higher priority than the ESN-based password.

What about DPFs (diesel particulate filters)?

There are two parts to the problem with DPFs. One is the presence of them, while the other is how they are managed by the basic engine management systems.

A DPF is a filter in the exhaust. It is designed to catch larger particles of soot in the exhaust gas. When they start to clog up, the management system finds that the back-pressure begins to rise, accompanied with a progressive drop in engine power. If the back-pressure becomes excessive, a warning light will come up on the instrument panel advising the driver. The engine management system may deliberately reduce engine power until the filter has been cleared.

The idea is that in stop/start town driving, the soot often seen while the turbo spins up is trapped in the filter. It is discarded later during a drive down an open road. The problem is that some vehicles are never driven in such a way that the filter can ever properly clear.

For many vehicles, the only way to clear the filter is to go for a drive. The simplest way is to find a road where the vehicle can be driven on light throttle at 50-70mph. A typical clearing drive to put the light out will last 20-30 minutes. There is generally no way to use scan tools to extinguish a DPF warning light.

DPFs are a particular issue for diesel engine tuners, because many performance tunes tend to be a little smoky. This is especially true of the simpler systems which only work on one vehicle circuit. The Versatile Tuning Box is less prone to this problem because it works on multiple systems.

The other part of the problem is that the Versatile Tuning Box needs to be aware of the mechanism that the OEM management system uses to clear the filter. The Versatile Tuning Box

will generally need to a special mode to recognise and work with this cleansing cycle. One of the many unusual features of the Versatile Tuning Box is that there is a real-time report available in the tuning software that shows when the DPF cleansing cycle is active.

What's an amal valve?

The proper name for this is a 'charge pressure control bypass valve', and it is used by the ECU to control the boost pressure. It is connected between the compressor outlet and the wastegate, with a bleed outlet back to the intake. Most modern turbos have amal valve control, but lesser or older systems may just have the wastegate plumbed directly to the compressor outlet.

By controlling the diversion function of this valve, the ECU can control the boost pressure. This is done by setting the valve to bleed off more of the pressure, rather than letting it open the wastegate. The Versatile Tuning Box can be used to change this profile, and use the amal valve system to adjust the boost pressure. How this is done will depend on the specific application.

As well as working with an existing amal valve, it is possible to extend the Versatile Tuning Box so that it controls a retro-fitted amal valve.

Why choose this box above the others?

This is a premium product, and it can be all yours! The equipment is not sold by Haslemere Tuning Ltd as a turn-key product - some tuning, connectivity, branding and packaging input have to come from the distributor.

It is a sensible compromise between the expensive option of commissioning your own development, and the dull, 'safe' choice of buying a simple pre-tuned product from other suppliers.

There are no up-front investments in special equipment, and the application support is both informed and personal.