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Smarty UDC Software - Custom tuning made Easy

Introduction

UDC stands for **User Defined CaTCHER**. The Smarty **UDC** tuning software (PC based) is an ADDITION to the already existing Smarty tuners. This means that the tuning software can be used with any Smarty product, both already sold or new.

The concept

The Smarty tuner retains all of its actual features. I.E. all power levels, options and possible settings remain "as is". In addition to the previous features there is now the possibility for the customer to program the Smarty with his own modified parameters to fine tune his truck. One more power level is added to Smarty's menu. The **User Defined CaTCHER**.

How it works

First thing, the Smarty tuner needs to be upgraded with the **UDC** feature. This is simply done by updating the tuner with a new software release which will become available for free download from our website. (Once the **UDC** software is released the tuners will leave our facility with the **UDC** feature already installed)

Then the Smarty **UDC** software will be able to identify the software for THAT truck and provide certain STOCK parameters to the customer which can be tuned at will.

Once the customer has modified the stock parameters on the PC to his needs, he will then download that SW to the Smarty. Now, the Smarty can program his truck with the **User Defined CaTCHER** level.

Easy tuning!

Our highest priority for the **UDC**: **"it has to be as simple as possible!"**. Any professional tuner will tell you that the most time consuming part in custom tuning is working out the right "base tune". I.E. a tune where all the parameters needed for the increased performance (like: torque limiters, fuel limiters, boost limiters, just to mention very few) are finely matched. There are hundreds of parameters that need to come together for a smooth, powerful and trouble free base tune! That requires broad knowledge and hundreds if not thousands dyno runs! AKA weeks if not months or years!

With the **UDC**, as the base software, the highest **CaTCHER** in the Smarty is used and the customer then needs to fine tune only the most performance relevant parameters.

For the CR 5.9L these engine operation parameters are :

- 1) Duration (how long the fuel is injected->The fuel quantity.)
- 2) Timing (when the fuel is injected in relation to the TDC)
- 3) Rail Pressure
- 4) Wastegate opening pressure (where applicable)
- 5) Torque management (more or less sensitive throttle)

It is now possible in very short time to finely match the above mentioned parameters to the truck's needs. **In addition**, we will provide "sample" tunes from the **real** tuning world. It is then possible to copy all (or part !) of these into each customer's software. A very good starting point for



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everybody's needs! Combine this with the "tuning tips" that we provide in the **UDC** software and fine tuning becomes **EASY!**



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A few SW operation details

- The previously mentioned tuning "sample files" can be modified and if wanted shared.
- It is possible to write a modified file into Smarty but it can **NOT** be read later on! This is most important for example the tuning shop that needs to protect the hard work.
- The software(s) we write into the ECM is protected against read out. Same reason as above.
- We do NOT read out the ECM! We don't need to. We don't want to! Smarty already has the software's for all trucks on board. Smarty only needs to identify the truck (Year / Tranny / Emissions / VIN#) this takes two seconds (Needed only if Smarty is not already VIN# locked).
- The features like the ability to alter certain parameters like for example the speed limiter ; rev limiter; shift defuel; depend upon the Smarty (JR or Sx) NOT upon the **UDC** SW!
Example: the JR does not provide the option to raise the rev limiter; that's not going to change even with the **UDC**. Those parameters remain in Smarty's options.
- Today, we're bringing to you the "Basic" tuning software version which allows to change the most important performance parameters. The "Professional" version is also in the works. The professional version will have hundreds of possible parameters to be worked on.
Of course the professional version will be more expensive than the Basic one. It will be possible to upgrade the Basic license to the Professional one.
- The first release will be for the S06PoD (Covers the 5.9L CR from 2003 to 2007). The SSR version is in the works and will follow shortly after the initial release. All other versions for the VP and 6.7L trucks will follow ASAP. It's a lot of work...
- The Smarty **UDC** software will work only in combination with USB dongles.
There will be a "main" dongle which enables the software to run and also contains **ONE** VIN# license. If more than one truck (VIN #) needs to be tuned with the **UDC** SW (tuning shops come to mind) then separate "license" dongles will be needed. One dongle, one VIN# license.
- There is no limit to the number of licenses that can be used with the same software but the Smarty will remain as is; one truck at a time. In other words, multiple vehicles require multiple Smarty's and license dongles but only one tuning software.
- The **UDC** SW will be downloadable from our web site but will work only when combined with a main dongle
- For evaluation purposes, a Demo software can be downloaded for free from our website at following link: <http://www.tomelectronics.it/DownloadUDC.html>. The Demo version can not save any changes made to a file and can not communicate with the Smarty.

Thanks for your attention!