Warp Real Time Tuning Quick Instructions:

The application can be downloaded from the RaceMe website:
http://www.raceme.eu/index.php?page=product&info=32

It will work in demo mode. In demo mode it is possible to evaluate the software but it is not possible to save or send any files.

To enable the full functionality of the Warp a License Key (Dongle) is needed. Once the license key is inserted into a USB port on the PC the WARP gains its full functionality.

The License Keys are coded individually. When a tuning file is saved, it becomes encrypted with the individual code of the License Key. Thus, it is not possible to open a tuning file without the License Key that encrypted it!   In the case of a Tuner with several work stations that need to be able to share files amongst them, (Special order only) it is possible to build keys with the same codes.

IMPORTANT NOTICE!

Since the VIN# Licensing is done on the RaceME Ultra or the MM3 there is no need for additional VIN# License Keys! The Tuner only needs the Warp License Key (Dongle) in his PC to be able to work on ANY stock software. In turn, the owner of the RaceME Ultra or the MM3 does NOT NEED ANY KEY!

The workflow with the Warp is: Get the stock file for the truck; Customize it; Get the customized file into the RaceME Ultra or the MM3; Program/Flash the truck with it. The process with deeper details is as follows.

1)	With a VIN# locked RaceME Ultra or the MM3, create the stock file for the truck:

In the RaceME Ultra's or the MM3 Main Menu-->ECM-->Get Stock File for Truck

The RaceME Ultra or the MM3 will write the Stock File for the truck onto the MicroSD card in the Folder: "Custom" → Folder "Stock". File Name: "RaceME.sgn". This file contains all the needed information about the truck like VIN#, Year, Installed software Version… The Tuner does not need to find or have stock files for the trucks!

2)   Transfer the Stock File to the Warp:

There are two possible ways to transfer this file to the Warp: Connected directly to the RaceME Ultra or the MM3 through the USB port OR "Remote tuning" without the direct USB connection to the RaceME Ultra or the MM3.

Connected:

Connect the PC with the Warp installed to the RaceME Ultra or the MM3. Start the Warp, go into menu: File->"Get Stock file". The Warp will import the stock file and open it, ready to become custom tuned.

Remote Tuning:

Should the owner of a RaceME Ultra or the MM3 want to send his file to a Tuner of his choice for customization all he needs to do is: Extract the MicroSD card from RaceME Ultra or the MM3; insert it into a PC; Copy the file "RaceME.sgn" onto the PC and then send it with an Email to his Tuner.

Once received, the Tuner renames (Example: CustomerName.sgn) and saves the file in a folder. Now the Tuner can open the file with the Warp and work on it.

3)   Once the stock software has been customized:

With the Warp, export the customized software as an "ECM" file. On the Warp Main screen, in the middle of the right side panel: Icon "ECM". The Warp automatically creates a folder named "Custom" (in the same folder where the stock file is stored), subfolder "ECM" and exports the customized file to it. This *.*.ECM file (Example: Basefile.ECM) is the one needed to flash the truck's ECM. Hint: RaceME Ultra's/MM3's file system is 8.3! This means the file name cannot be longer than eight characters. The files need to be named keeping this in mind!

It is now possible to get the customized file to the RaceME Ultra or the MM3 either connected or through Remote Tuning.

Connected.

It is possible to either send the customized file to the MicroSD card inserted into the RaceME Ultra or the MM3 through the USB connection or write it directly onto the MicroSD card inserted into the PC. Sending the file through USB will require several minutes while writing it directly onto the MicroSD card requires only a few seconds. Either way, the Warp totally automates the operations. It detects automatically if there is a USB connection to the RaceME Ultra or the MM3, if the MicroSD card is inserted into the PC, or both. The Warp will ask where the customized file has to be stored.

Remote Tuning.

The Tuner sends the customized file to his customer through an Email. The customer writes that file onto the MicroSD card: Folder "Custom" --> Folder "ECM". Then the customer inserts the MicroSD card into the RaceME Ultra or the MM3 and programs/flashes his truck with it. To do so, on the RaceME Ultra or the MM3 from the Main Menu--> ECM--> Program Custom File To ECM--> Select the Customized File (Example: Basefile.ECM)-->Set the Speed Limiter--> Program (the ECM).

It is possible to store more than just one customized file on the RaceME Ultra or the MM3! The only limit for the number of files is the capacity of the MicroSD card!

In addition to the customized ECM file it is possible to further expand the capabilities of the RaceME Ultra or the MM3!

There are two types of possible further customizations:

Real Time Group (RTG) & Real Time Parameter (RTP)

What is the scope of those two? Both of them can be sent in -REAL TIME- (for further customization) to the ECM from the RaceME Ultra or the MM3 ON TOP of the customized ECM file that has been programmed/flashed into the ECM.

RTG: should be used for power levels that can be changed in Real Time or, if you prefer, On the Fly. Since it takes several parameters, tables and maps to customize a power level, those are called a group.

To build a RTG: Take a stock file, change any and all real time capable parameters, curves or tables that are needed to change the power level of the base file (or whatever else needed), then export it as a RTG file.

On the Warp's Main screen, in the middle of the right side panel: Icon "RTG". The Warp automatically creates a folder named "Custom" (in the same folder where the stock file is stored) and a subfolder named "RTG" and exports the file to it. Hint: RaceME Ultra's/MM3's file system is 8.3! This means the file name cannot be longer than eight characters. The files need to be named keeping this in mind!

The process of sending the RTG to the RaceME Ultra or the MM3 is the same as with the .ECM files.

On the RaceME Ultra or the MM3 the *.*.RTG files are displayed in the Real Time menu (In any gauge layout, top-right section, symbol RT) as "Power Levels".

RTP: should be used for added changes wanted to the ECM file and the RTG. Also the RTP can be changed in Real Time or, if you prefer, On the Fly.   As an example for what the RTP can be used for: different levels for the Exhaust Brake +/- aggressive. Since they should do single changes they are called a parameter.

To build a RTP: Take a stock file, change any and all real time capable parameters, curves or tables that are needed and then export it as a RTP file.

On the Warp's Main screen, in the middle of the right side panel: Icon "RTP". The Warp automatically creates a folder named "Custom" (in the same folder where the stock file is stored) and a subfolder named "RTP" and exports the file to it. Hint: RaceME Ultra's/MM3's file system is 8.3! This means the file name cannot be longer than eight characters. The files need to be named keeping this in mind!

The process of sending the RTP to the RaceME Ultra or the MM3 is the same as with the .ECM files.

On the RaceME Ultra or the MM3 the *.*.RTP files are displayed in the Real Time menu   (In any gauge layout, top-right section, symbol RT) as "RT Custom Adder".

Technically there is NO difference between the RTG and the RTP! It is possible to write as many Real Time tables, and or parameters as wanted/needed in BOTH of them! They are intentionally labeled differently. They go into different Real Times folders in the RaceME Ultra or the MM3 solely to make it easier for the user to understand what he's required to do.

A real world example. The tuner did his base software. This software adds 100HP to the stock power.

The ECM was flashed with this software, now of course the truck makes 100HP more than stock. Then the tuner also did a RTG file that's rated 150HP above stock. When the user sends this RTG from the Power Level Menu to the ECM he will be getting 150HP above stock. Then the tuner added also three exhaust brake files (Strong/Mid/Stock) using the RTP.   Now the customer can change the exhaust brake on any HP level he's actually running using the "RT Custom Adder" in the RaceME Ultra's or the MM3's RT menu.

The number of Power Levels or Custom Adders that can be stored on the RaceME Ultra or the MM3 depends solely on the MicroSD card capacity.

Finally, to avoid any possible misunderstanding and confusion.   The real time capable parameters depend upon the architecture of the original/stock software and the RAM size in the ECM. As a rule of thumb than newer the ECM than more Real Time parameters are available.