General Settings

Map Information

The Map information screen, **Name Model** and **Transmission**, contains info for the TCU application for a specific vehicle. This helps the tuner to recognize previous work and tuning data. It is saved in the TCU and also in PC maps. It does not affect any tuning on the engine.

Map no – The firmware consists of 4 maps for different transmission setups or tuning algorithms. This is only an indication and the map cannot be forced on this page. The map is determined by the Map Selection switch that is selected. Map no on the TCU software is also displayed in the real-time data. Maps can be changed on the fly. Map 1 and 2 as well as 3 and 4 can be changed while driving. From 2 to 3 the vehicle must be stationary. This is a failsafe for high and low range applications.

NB!! Note that the sensor calibrations can only be done in Map number 1.

General Purpose Outputs

There are two or more general purpose GP outputs to configure for several different functions. These outputs can be configured to use the analogue signals and switch a relay on or off when certain limits have been reached.

Example: RPM for a shift light, Oil temperature to control a fan relay or Shifter to switch a reverse alarm on etc.

This is a generic block so you first need to select which output will be used.

Now select a signal to be used as an output.

RPM – RPM/min 100rpm increments
Speed – road speed at 1 Km/h increments
TPS – percentage at 1% increments
Oil Temperature – degrees at 1°C increments
Gear – select a number of gears
Shifter – select a number from the bottom line representing the following shifter positions:

1	2	3	4	D	N	R	P
1	2	3	4	5	6	7	8

Map No – select a Map from 1 to 4

The appropriate limit values are set in the min and max blocks.

For example, for a shift light select RPM and set the minimum value at 5000 RPM when the shift light must come on. If the RPM go higher than 7000 RPM the shift light will switch off. If the min value is smaller than the max value, the relay will switch on between the limits and off outside the limits. If the minimum value is higher than the max value, the relay will switch off between the limits and on outside the limits.

Note also that the relay will switch on or off at the set value +/- 1 increment. For the above example the relay will switch on at 5100 RPM and off at 7100 RPM when the RPM increase, and on at 6900 RPM and off at 4900 RPM when the speed decrease. This means that if an RPM value hovers around a limit, there is a two value increment dead band that ensures that the relay is not switching erratic.

Note! If you don't use these outputs, select Not Used so that valuable processor time can be saved. On certain firmware these outputs will be disabled as their drivers may be used in the application for other

features. These outputs are not meant to draw high current so for fans and lights use them to switch on a relay that can handle the current. See the drawings and specifications for each product.

Speedometer Output

This feature is used for Speedometer Calibration. This is handy for engine conversions.

You can adjust the number of output pulses per prop shaft revolution. You can also do a fine calibration on the speedo. Always start with a calibration value of 100. Then adjust the Pulses till you are as close to the value as possible. Then go to calibration and make a Percentage adjustment to get it to read accurate. Speedos usually read a bit over to compensate for Tyre wear and keep the driver in the limits.

This signal is a critical setting which means it is saved separate from the 4 maps. It can only be calibrated in MAP 1 and does not change when other maps are loaded in the TCU. The Clone function will alter this calibration to the Clone map.

Auxiliary Output

These registers are custom settings which is used for development mostly and explained in special instructions. When a new transmission is developed it may require new settings that is not placed in the software. Most standard firmware will blank out these settings.