

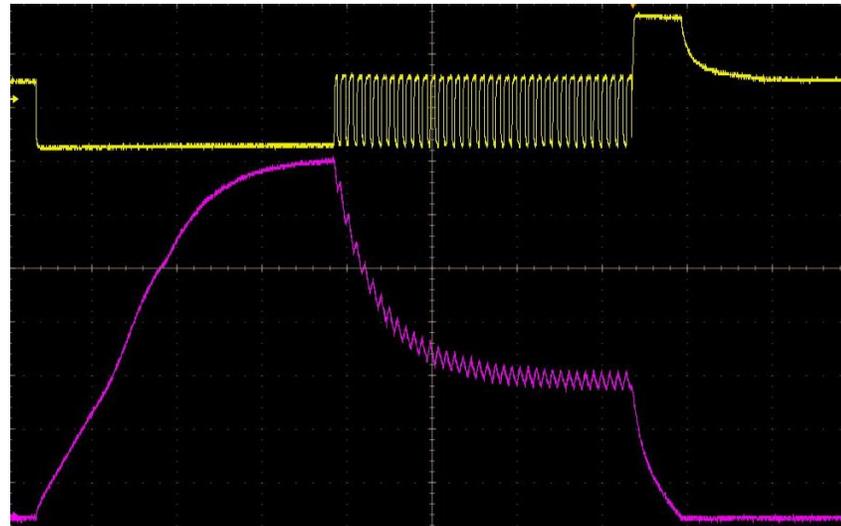


# Presentation Driver **SATPH**

# State of Art

Currently the nearly totality of the **CNG-LPG injectors** present on the market, both **aftermarket** and **OEM**, works with coils having electrical resistance between 1 and 3 Ohm and they are piloted from specific ECU having **Peak & Hold** or **PWM strategy**.

Example of signal PWM and Peak and Hold sent from the ECU to the injector



# The problems of the control

During our long experience into the field we have had to face with problematics referred to our products but caused exclusively from ECU that weren't setted into the correct way and that of consequence didn't permit to the injectors to work in optimal conditions.

Even though as manufacturers of the specific injectors type **Peak and Hold** we suggest to the user, ( the manufacturer or calibrator of the ECU ), the ideal characteristics of the signal of the control that permit to the injector to work in an optimal way, practically there is not the **warranty** that these parameters will be respected determining a not ideal functioning with a bigger probability of failure.

# Purpose of the development

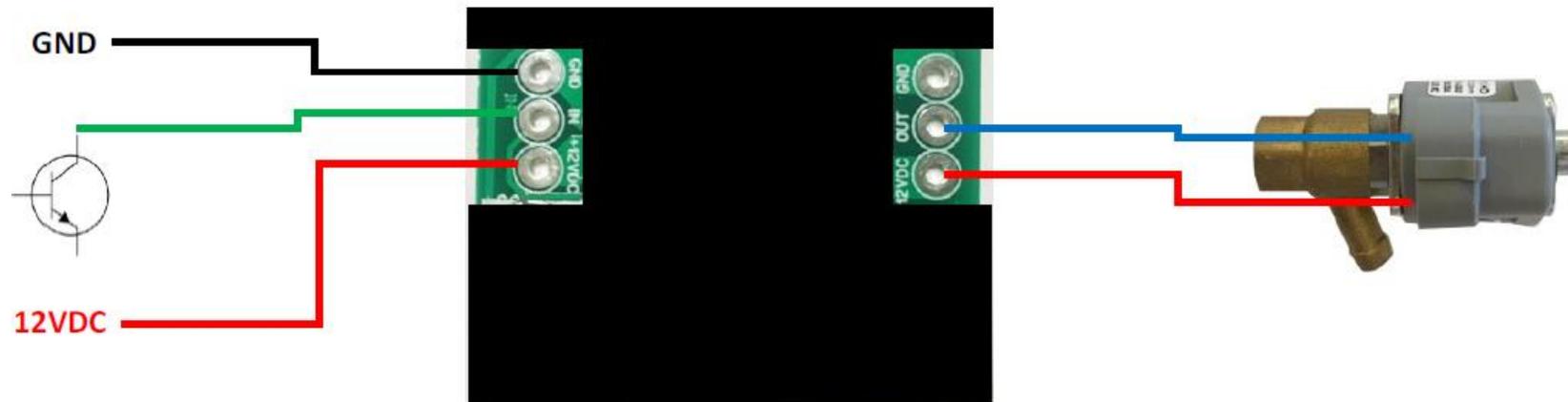
**The driver SATPH** transfers the part of power and control, and consequent programming of the necessary parameters on the same injector, in this way we can grant better performances and higher durability of the products since will be not the manufacturers of the ECU anymore to set the parameters of our injectors.

***From this idea born the development of the Electronic injector.***

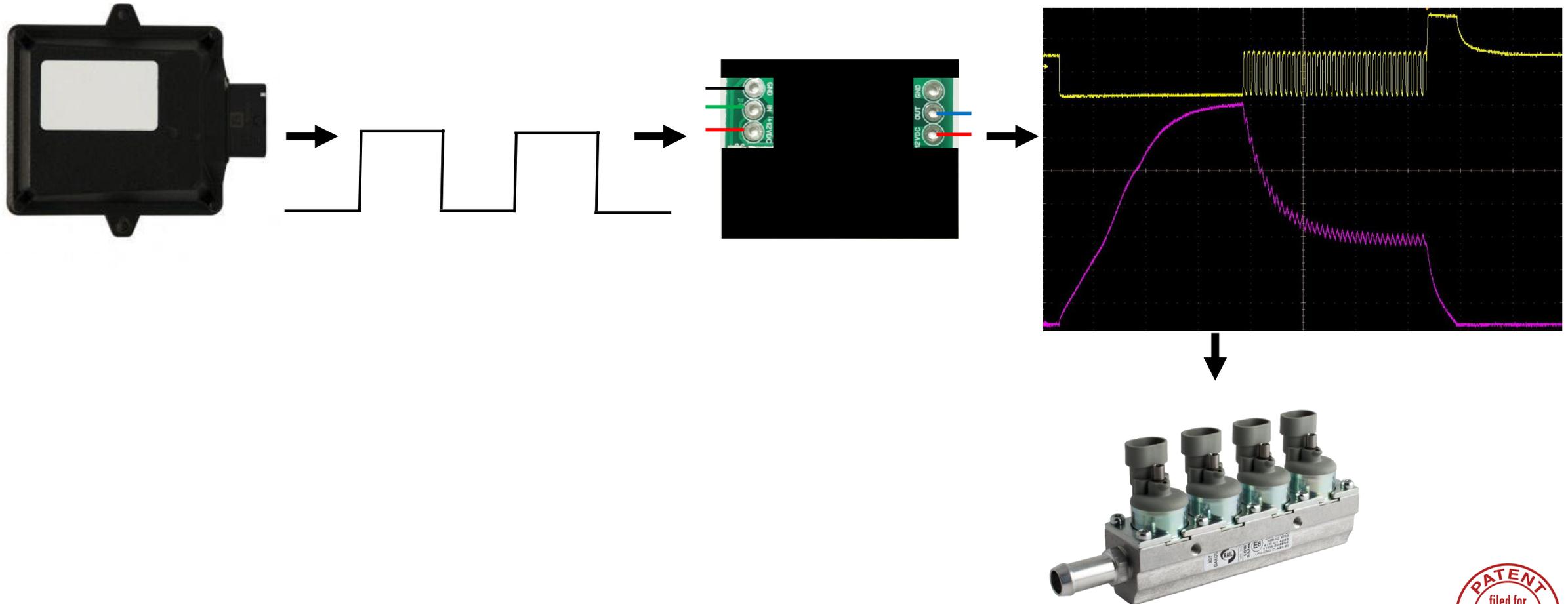
# What is the driver SATPH

The driver SATPH is an electrical device that permits to the injectors that work in Peak and Hold or PWM modality, to work in saturated modality with signal 12V On-Off for the required duration of injection. The driver could be available both stand-alone device and integrated into the body of the injector.

## Demonstrative Sample



# Example of the signal that the ECU will send to the driver SATPH and that the driver SATPH will send to the injector



# Advantages

1. With this product **every ECU could be simplified** in constructive terms and also in terms of use.
2. Use the injectors that actually work in **Peak and Hold** or **PWM** modality, in saturated modality.
3. The saturated injectors that actually are on the market have a strong limitation of the gas flow rate, this limitation will be not present anymore with **our injectors**, since changing only the calibrated nozzle, it can have a major or minor flow rate upon the necessity. Exist also another logistic advantage in managing a unique product valid for varied applications in terms of required flow.



**Thank you.**