

## PRODUCER OF AUTOGAS EQUIPMENT

## CATALOG OF PRODUCTS

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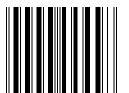
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0048(74)832-39-80 fax. 0048(74)832-39-60

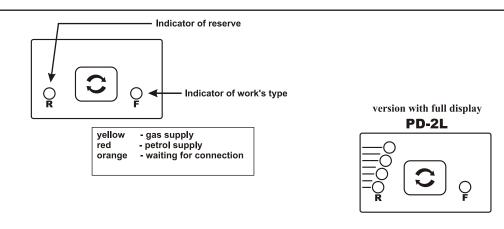
e-mail:protecdigital@home.pl www.protecdigital.pl



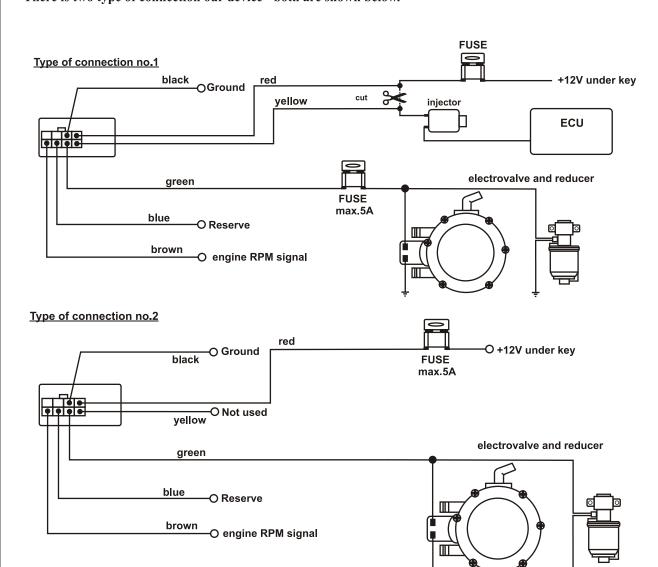
Description: Switch injection (microprocessor) indicator of work's type full project of LPG level indicator of reserve



Symbol: PD-2



PD-2 can be used in vehicles equipped in injection. There is two type of connection our device - both are shown below.

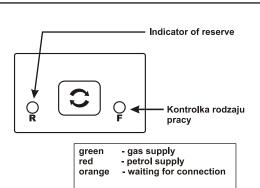




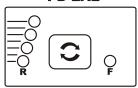
Switch injection (microprocessor) indicator of work's type full project of LPG level indicator of reserve, additional relay

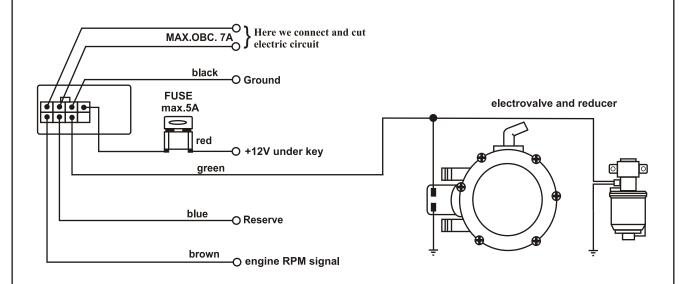


Symbol: PD-2A



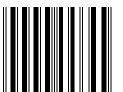
version with full display PD-2AL





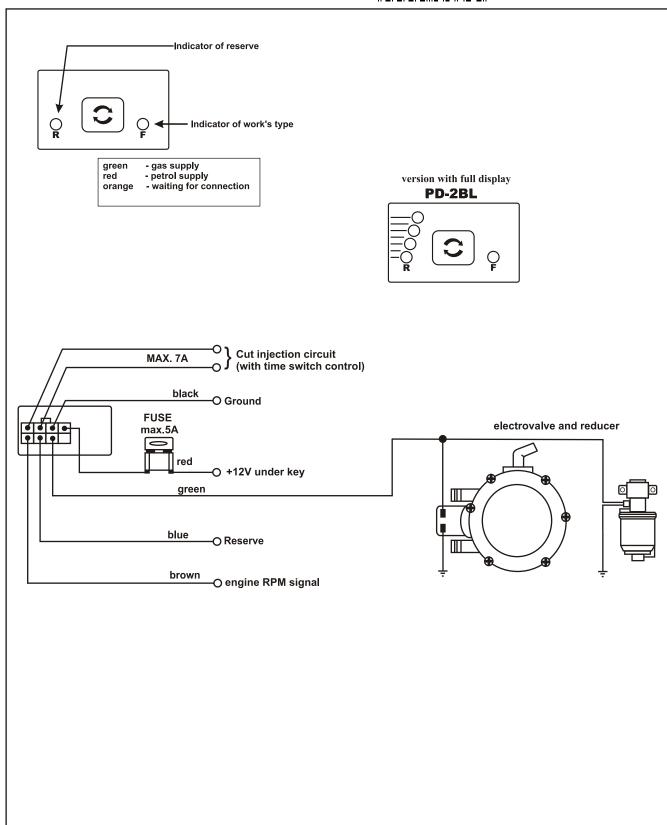


Switch injection (microprocessor) indicator of work's type full project of LPG level indicator of reserve, additional emulator



Symbol:

PD-2B



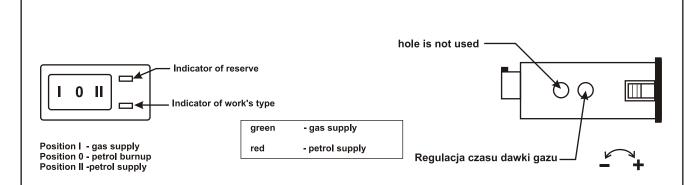


Switch injection (microprocessor) indicator of work's type indicator of reserve

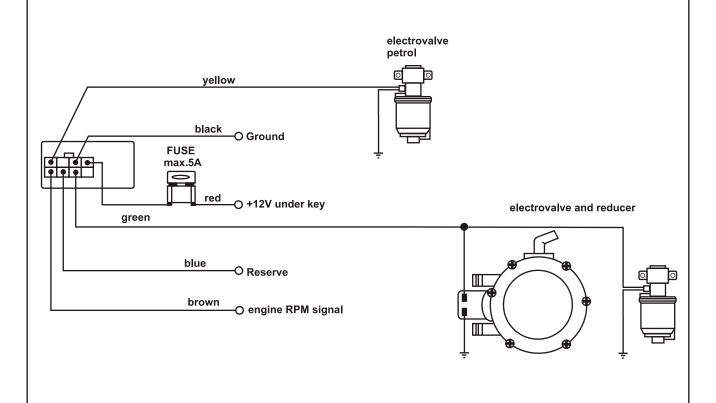


Symbol:

PD-7

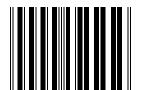


Connection scheme is shown below.



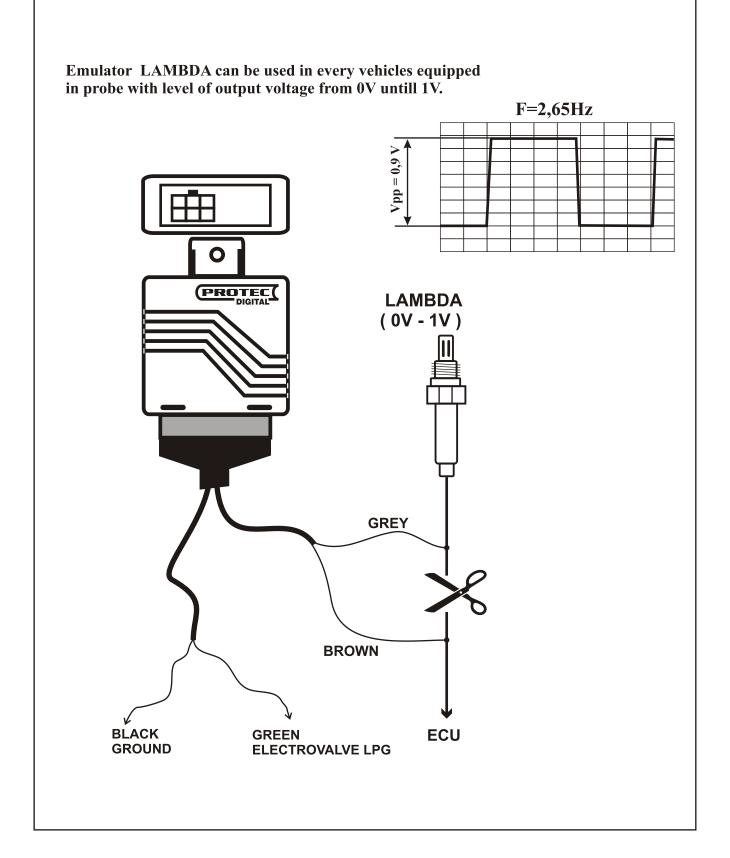


Emulator LAMBDA ( $0\,\mathrm{V}$ - $1\,\mathrm{V}$ ) with wiring system for "cutting"



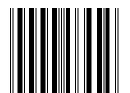
Symbol:

**PD-10** 



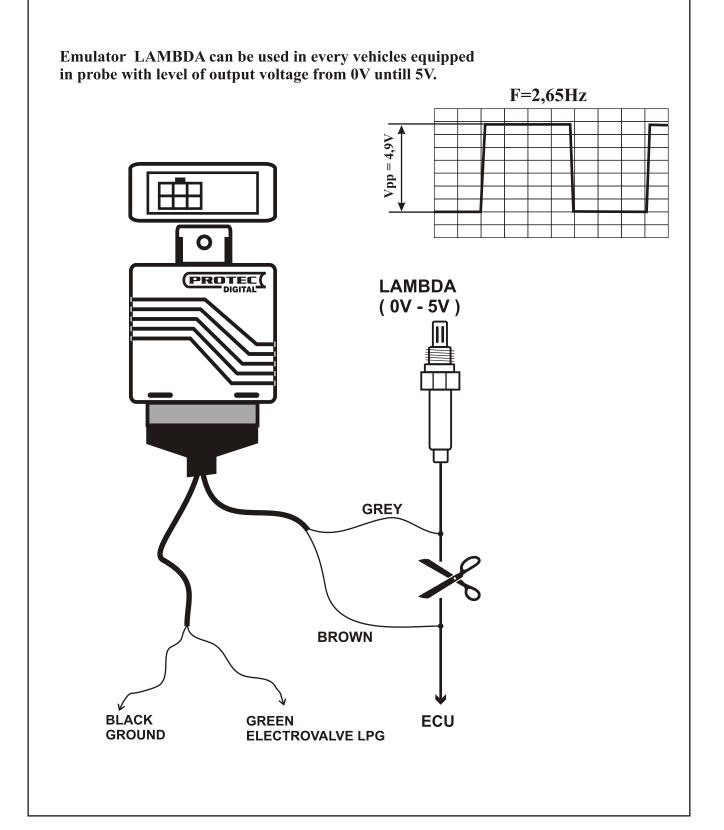


Emulator LAMBDA probe (0 V - 5 V) with wiring system for "cutting"



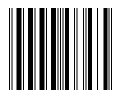
Symbol:

**PD-10A** 



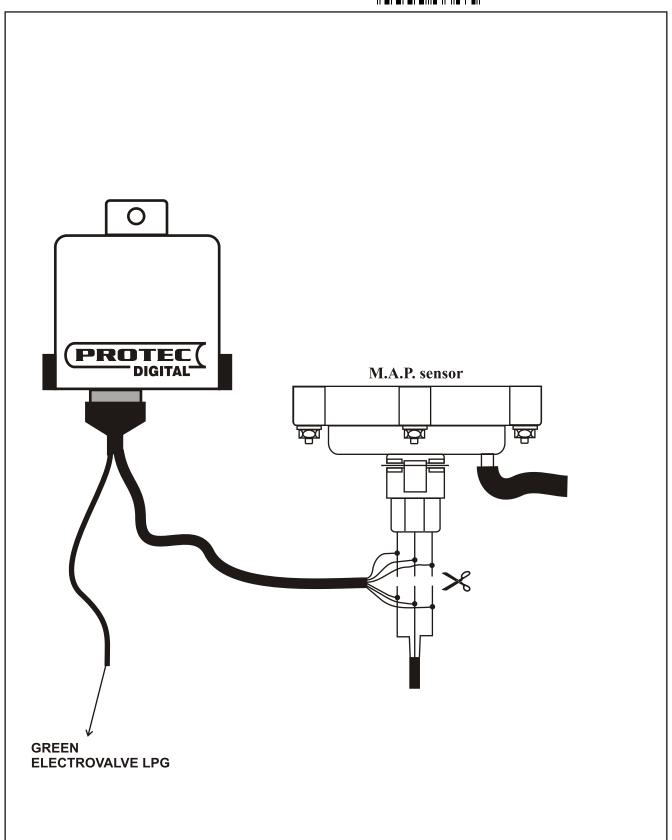


Description:
Emulator M.A.P sensor version with wiring system for "cutting"



Symbol:

**PD-12A** 





Adder of firing pulses max. 6- cylinder



Symbol:

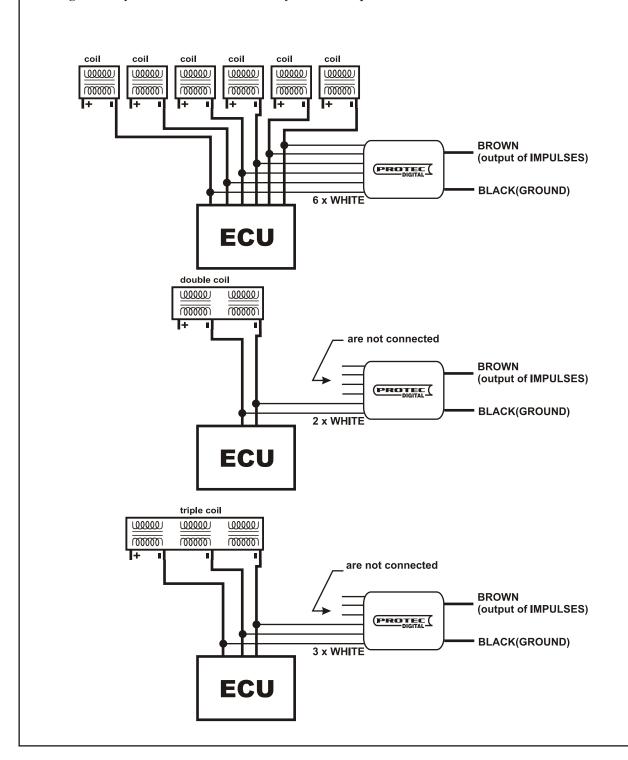
**PD-15** 

Adder of firing pulses is used to summarize firing pulses in vehicles, where a few ignition coils has been applied. Scheme of connection is shown below.

Adder can be used in all combinations "coils quantity-cylinders quantity"

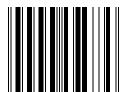
White wires which are not used stay unconnected

During assembly of adder it is not neccessary to check sequence of coils.





Adder of firing pulses with built-in amplifiers max. 6- cylinder



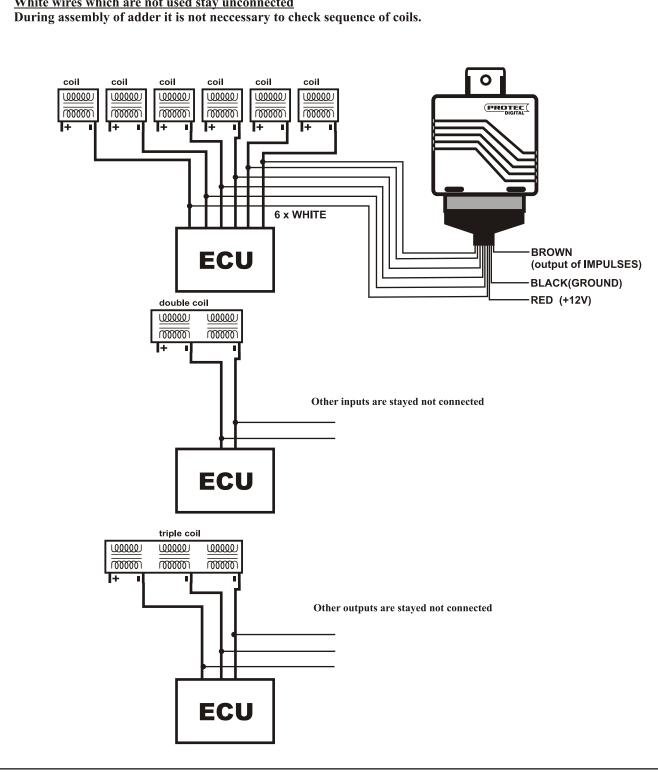
Symbol:

**PD-16** 

Adder of firing pulses is used to summarize firing pulses in vehicles, where a few ignition coils has been applied. Scheme of connection is shown below.

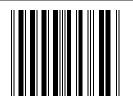
Adder can be used in all combinations "coils quantity-cylinders quantity"

White wires which are not used stay unconnected





Description:
Emulator singlepoint injection
for FIAT SEICENTO 900 ccm regulation of sovraposition time (gas/petrol) wiring system for "cutting"



Symbol: **PD-20S** 

CONTROL The LED on -makes you know the time overlap The trimmer has been reached the best time overlap for most of the cars **INDICATOR** PROTEC ( **INJECTOR GREY BROWN GREEN BLACK ECU ELECTROVALVE LPG GROUND** 



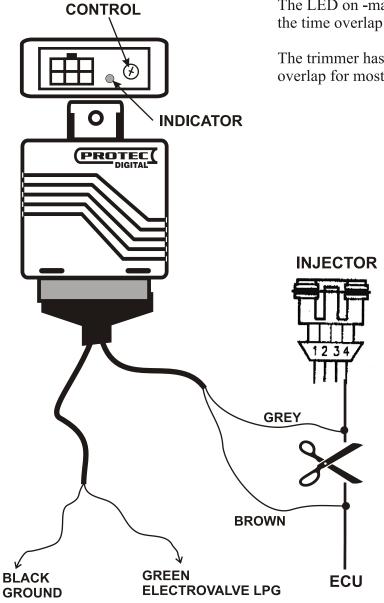
Emulator singlepoint injection regulation of sovraposition time (gas/petrol) wiring system for "cutting"



Symbol:

**PD-20** 

The emulator can be used in all vehicles equipped by singlepoint injection. Regulation trimmer is used to regulation of sovraposition time (GAS / PETROL). Emulator can be used in MONOBOSCH,MAGNETI-MARELLI



The LED on -makes you know the time overlap

The trimmer has been reached the best time overlap for most of the cars

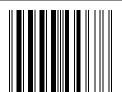
Example of connecting MONOBOSCH

Example concern:
CITROEN SAXO 1.1 ie
CITROEN ZX 1.4 ie
CITROEN AX 1.4 ie
In the other cars we cut
pos.3
It can be used:
CITROEN AX 1.4 ie MPI
PEUGEOT106 1.4 MPI
VOLVO 480/440/460 1.7 MPI



Description: Emulator multipoint injection max. 4-cyl.(10 -15 $\Omega$ )

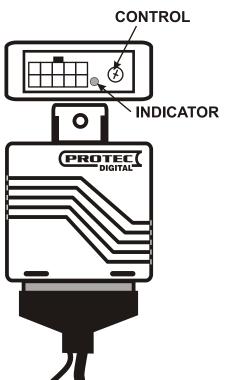
Regulation of sovraposition time wiring system for "cutting"



Symbol:

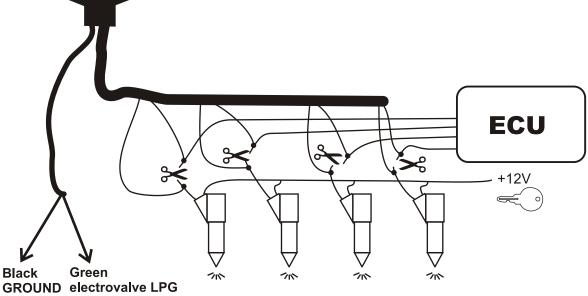
**PD-21A** 

The emulator can be used in all vehicles equipped by multipoint injection. Regulation trimmer is used to regulation of sovraposition time (GAS / PETROL). The emulator has to be installed only if injectors resistance is between 10 till 15  $\Omega$ 



The LED on - makes you know the time overlap

The trimmer has has been reached the best time overlap for most of the cars.





Description: Emulator multipoint injection max. 4-cyl.(10 -15)Ω

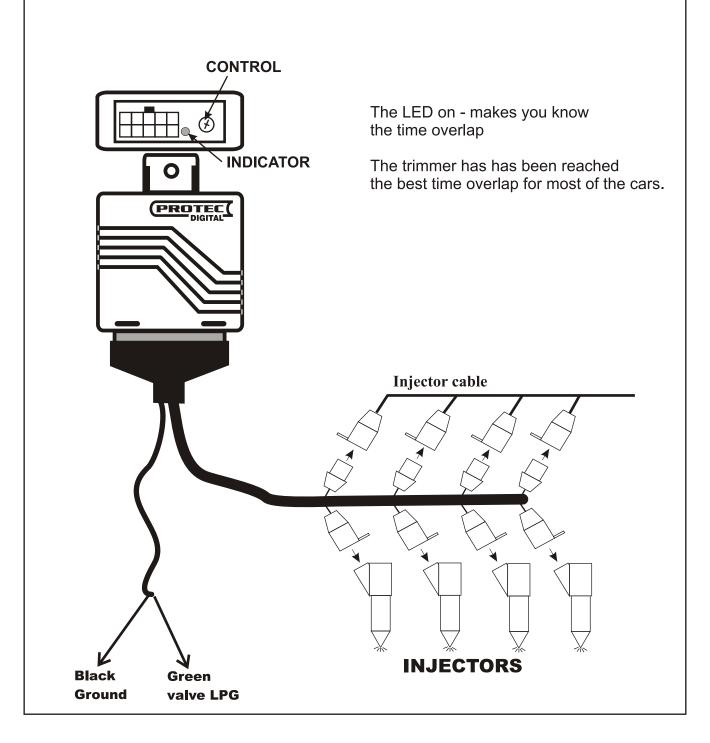
Regulation of sovraposition time wiring system with EUROPA plug



Symbol:

**PD-21** 

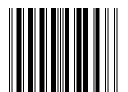
The emulator can be used for all vehicles equipped by multipoint injection. Regulation trimmer is used to regulation of sovraposition time (GAS / PETROL). The emulator has to be installed only if injectors resistance is the same as or less then 15  $\Omega$ 





 $Description: {\bf Emulator\ multipoint\ injection}$ max. 4-cyl.(5 -  $10\Omega$ )

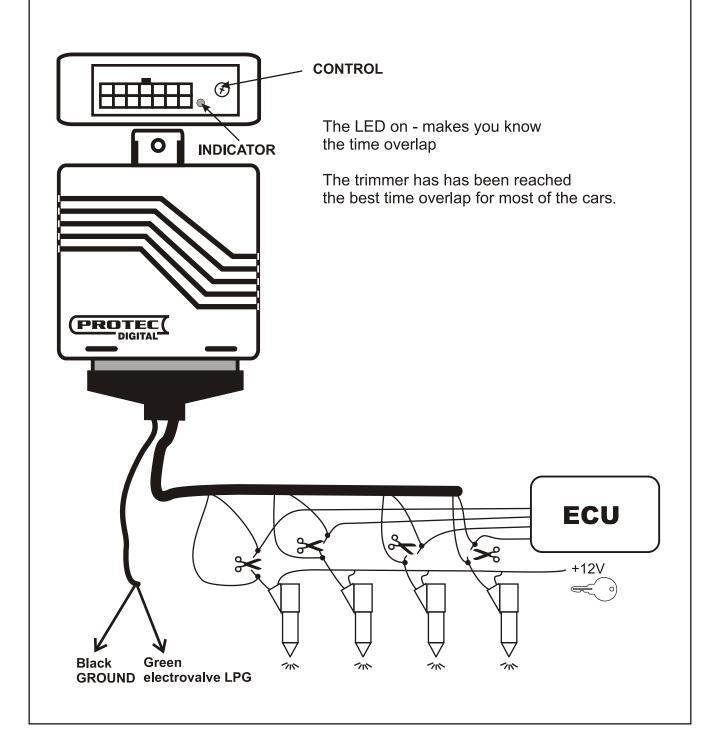
Regulation of sovraposition time wiring system for "cutting"



Symbol:

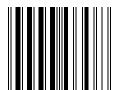
PD-21AJ

The emulator can be used in all vehicles equipped by multipoint injection. Regulation trimmer is used to regulation of sovraposition time (GAS / PETROL). The emulator has to be installed only if injectors resistance is from 5 untill  $10\,\Omega$ ATTENTION Emulator is different from PD-21, symbol is shown on the label





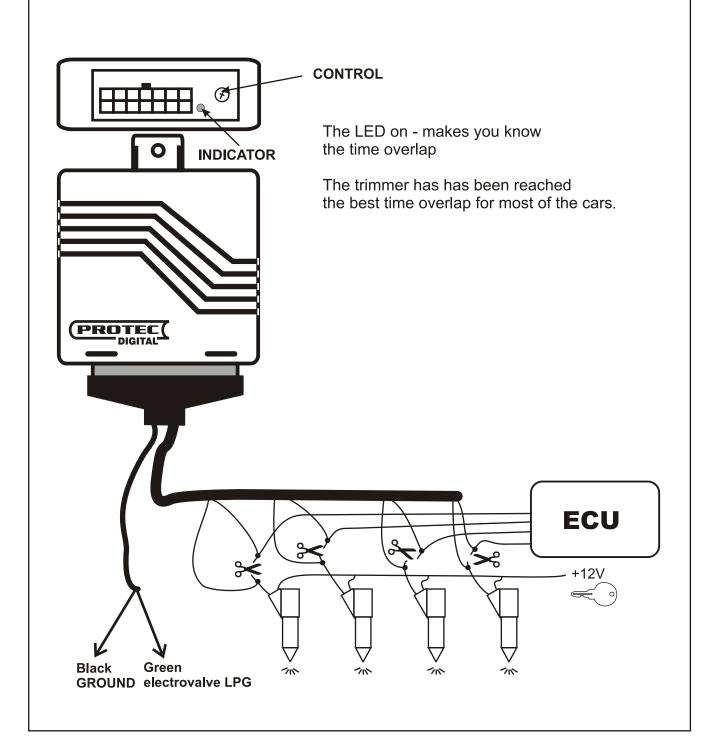
Description : Emulator multipoint injection max. 4-cyl.(2 -  $5\Omega$  )MITSUBISHI Regulation of sovraposition time wiring system for "cutting"



Symbol:

**PD-21AM** 

The emulator can be used in all vehicles equipped by multipoint injection. Regulation trimmer is used to regulation of sovraposition time (GAS / PETROL). The emulator has to be installed only if injectors resistance is from 2 untill 5  $\Omega$ ATTENTION Emulator is different from PD-21,PD-21AJ symbol is shown on the label





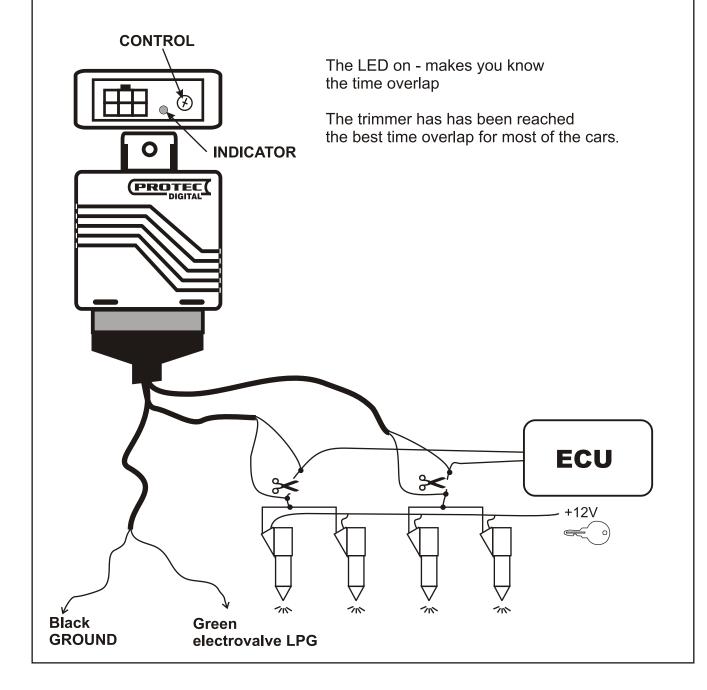
Emulator 2-channel injection Regulation of sovraposition time wiring system for "cutting"



Symbol:

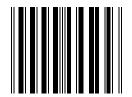
**PD-21B** 

The emulator can be used in all vehicles equipped by multipoint injection. Regulation trimmer is used to regulation of sovraposition time (GAS / PETROL). The emulator has to be installed only if injectors resistance is from 10 untill 15  $\Omega$  Example of using 2-channel emulator in case if two injectors are controlled is presented below. Emulator can be also used when three injectors are controlled at the same time.





 $\begin{tabular}{ll} Description: Emulator multipoint injection \\ max. 4-cyl. (10-15 $\Omega$) \\ Regulation of sovraposition time \\ wiring system with FIAT plugs \\ \end{tabular}$ 

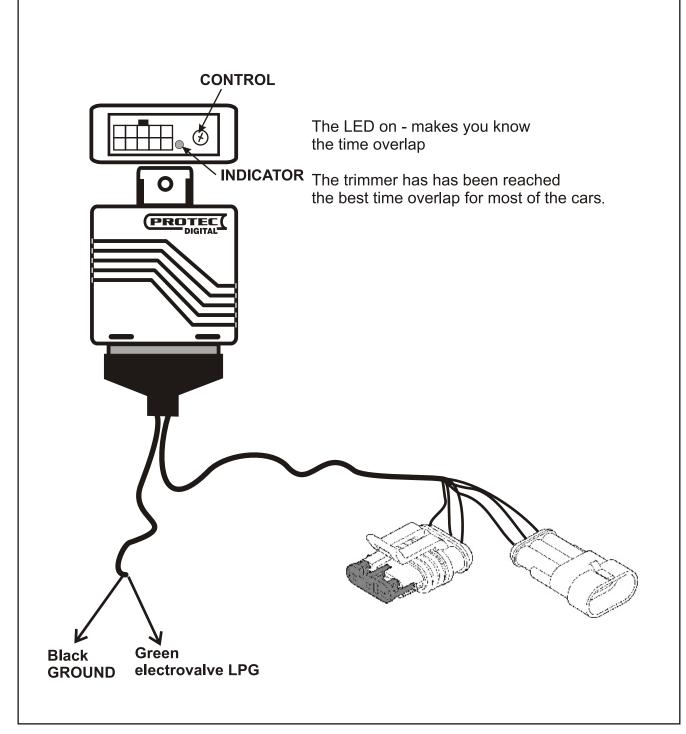


Symbol:

**PD-21F** 

The emulator is used in FIAT (BRAVO,BRAVA).

Regulation trimmer is used to regulation of sovraposition time (GAS / PETROL).





Description: Emulator multipoint injection max. 4-cyl. (2,6  $\Omega$  ) RENIX Regulation of sovraposition time wiring system for "cutting"

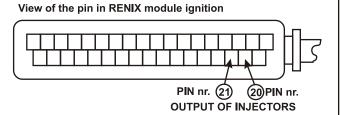


Symbol: **PD-21R** 

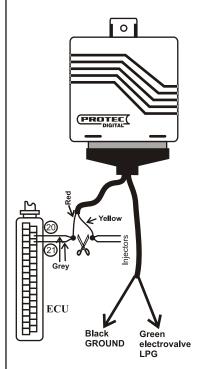
The emulator RENIX is used in all vehicles (only 4-cyl.)

equipped in RENIX module ignition.

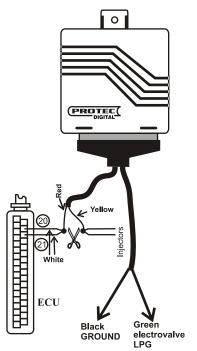
The emulator has to be installed only if injectors resistance is around 2,6 $\Omega$ 



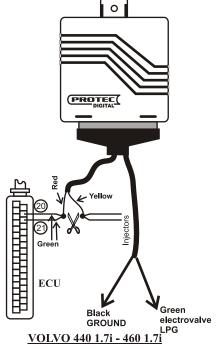
## **Examples of connection in different cars**



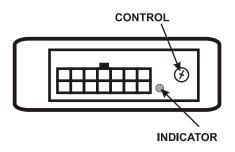
**RENAULT 19 16V RENAULT CLIO 16V** 



**RENAULT 21-25** 



ATTENTION!! If for pin no. 20 a wire 0,5mm is connected in the brown-yellow colour please do not installed the emulator





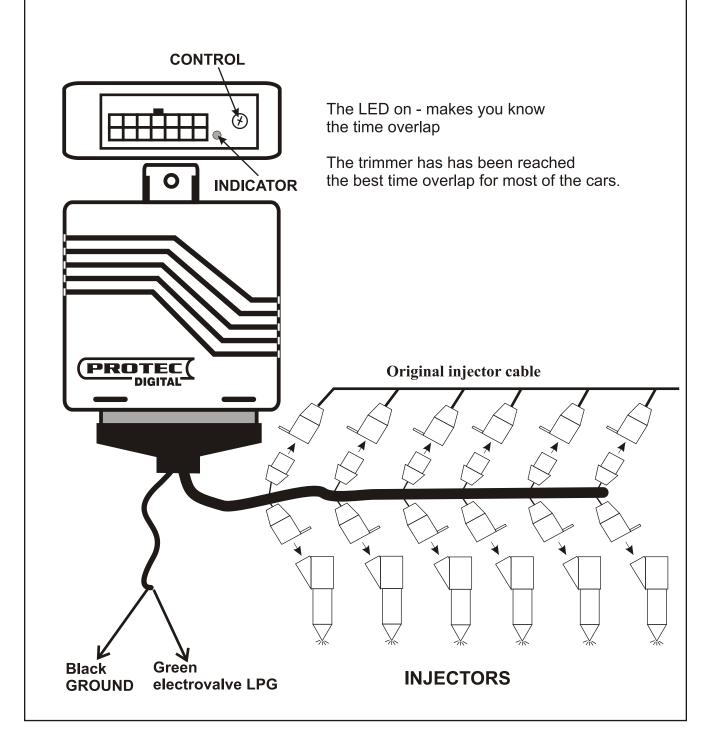
Description: Emulator multipoint injection max. 6-cyl.(IN-LINE engine) Regulation of sovraposition time wiring system with EUROPA plugs



Symbol:

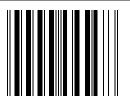
**PD-22** 

The emulator can be used in all vehicles equipped by multipoint injection. Regulation trimmer is used to regulation of sovraposition time (GAS / PETROL). The emulator has to be installed only if injectors resistance is from 10 untill  $15\Omega$ 





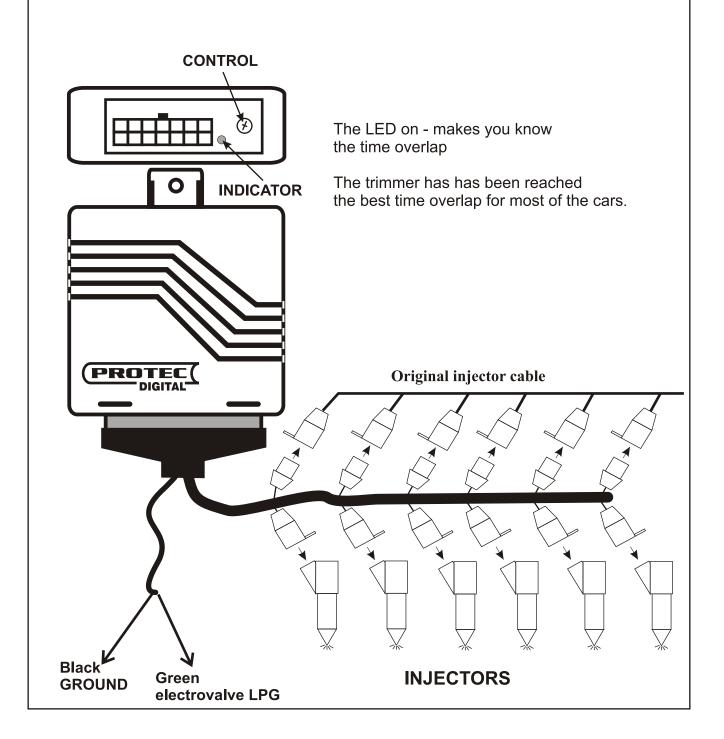
Emulator multipoint injection max. 6-cyl.(V-TYPE engine) Regulation of sovraposition time wiring system with EUROPA plugs



Symbol:

**PD-22V** 

The emulator can be used in all vehicles equipped by multipoint injection. Regulation trimmer is used to regulation of sovraposition time (GAS / PETROL). The emulator has to be installed only if injectors resistance is from 10 untill 15  $\Omega$  Wiring system in emulator type PD-22V is longer than in PD-22





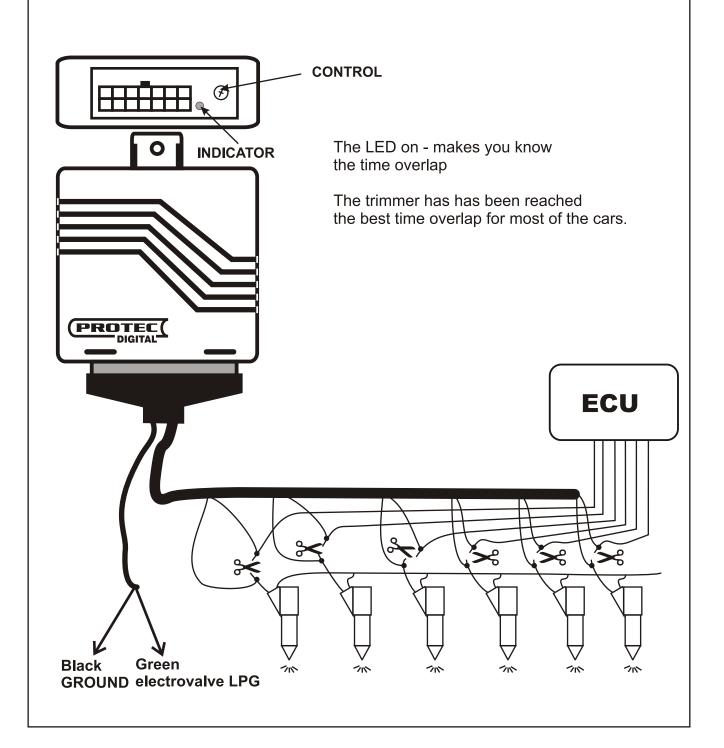
Description: Emulator multipoint injection max. 6-cyl. (  $10 - 15\Omega$ ) Regulation of sovraposition time wiring system for "cutting"



Symbol:

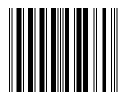
**PD-22A** 

The emulator can be used in all vehicles equipped by multipoint injection. Regulation trimmer is used to regulation of sovraposition time (GAS / PETROL). The emulator has to be installed only if injectors resistance is from 10 untill 15  $\Omega$ 





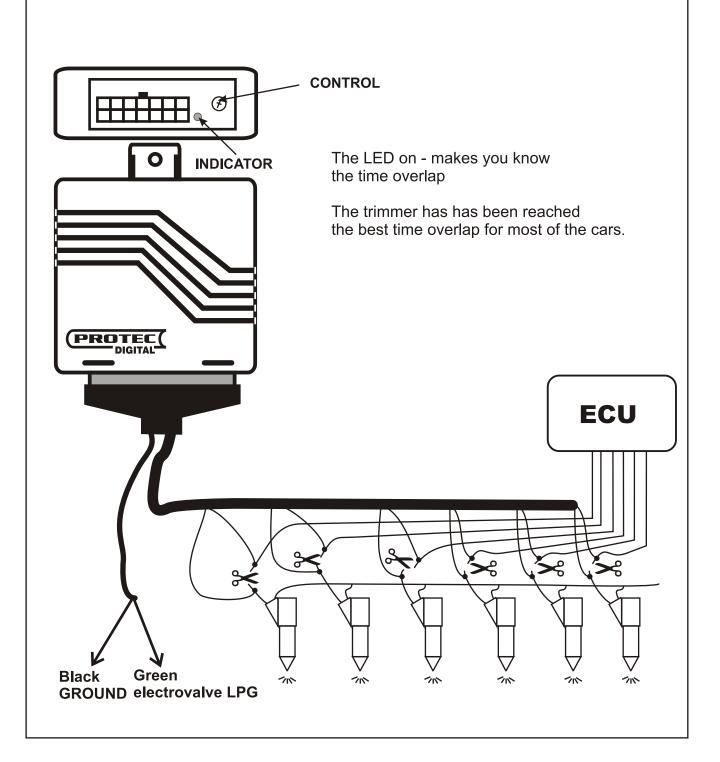
Description: Emulator multipoint injection max. 6-cyl. (5 -  $10\Omega$ ) Regulation of sovraposition time wiring system for"cutting"



Symbol:

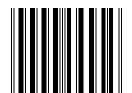
PD-22AJ

The emulator can be used in all vehicles equipped by multipoint injection. Regulation trimmer is used to regulation of sovraposition time (GAS / PETROL). The emulator has to be installed only if injectors resistance is from 5 untill 10  $\Omega$ 





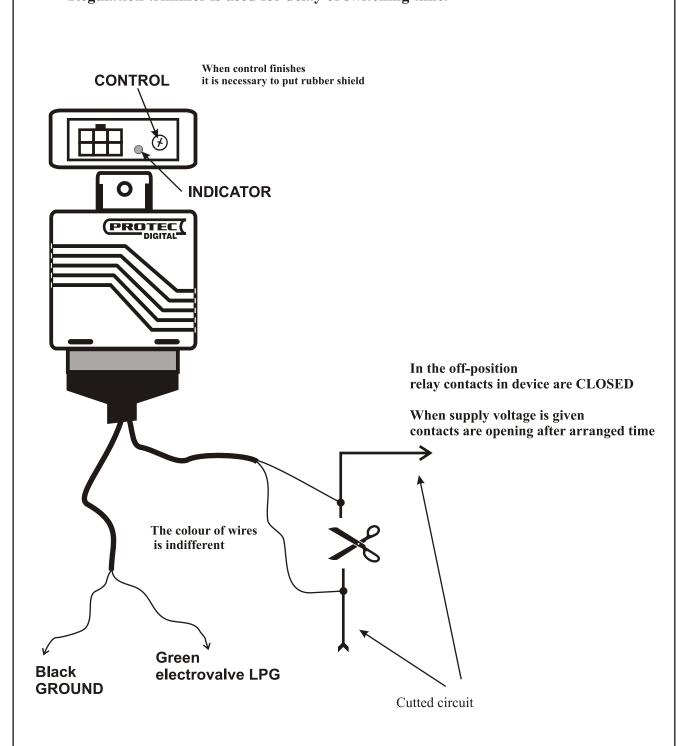
Time relay Regulation of switching time Relay loading 10 A



Symbol:

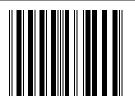
**PD-24** 

Time relay can be used in any electric circuit. Maximum relay loading cant be more than 10 A. Regulation trimmer is used for delay of switching time.





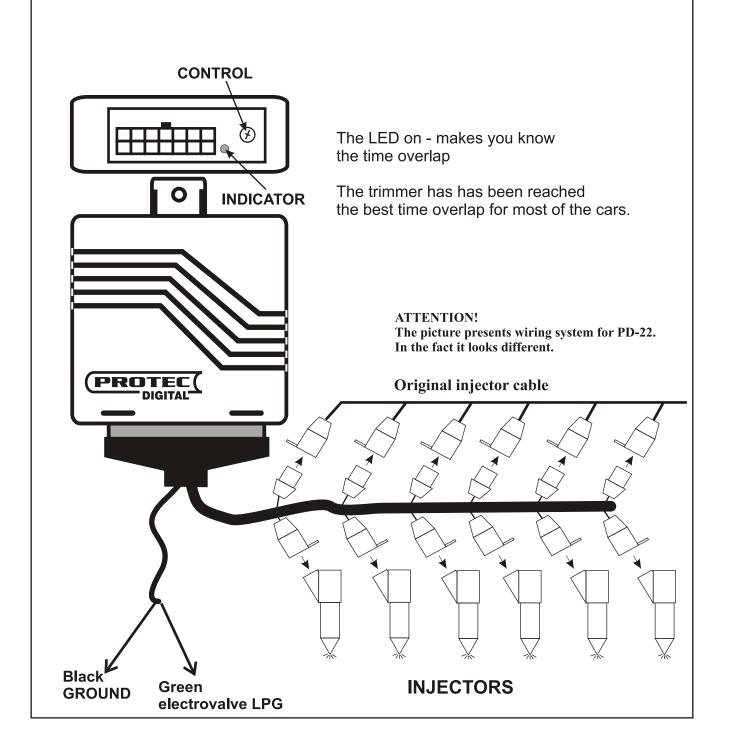
Emulator multipoint injection max. 8-cyl.(10 - 15 $\Omega$ ) Regulation of sovraposition time wiring system with EUROPA plugs



Symbol:

**PD-28** 

The emulator can be used in all vehicles equipped by multipoint injection. The emulator has to be installed only if injectors resistance is from 10 untill 15  $\Omega$  Wiring system in emulator type PD-28 consits of two wiring systems type PD-21





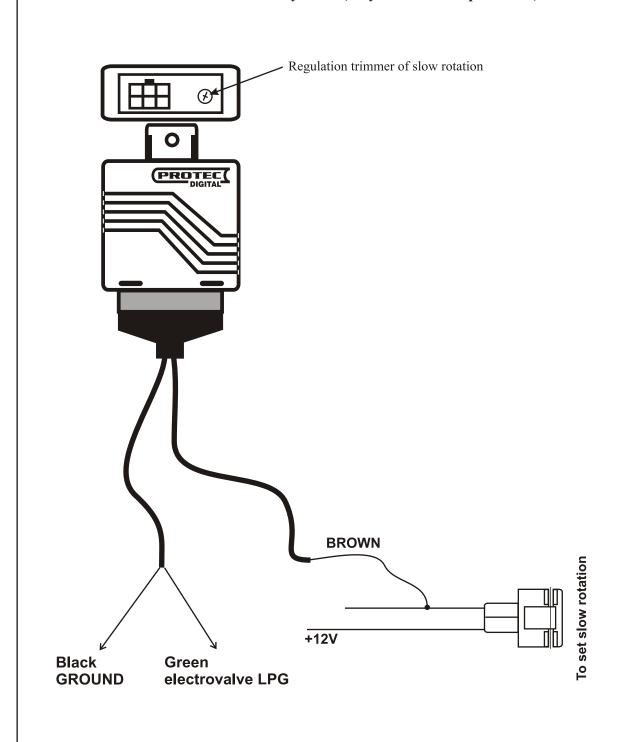
Slow rotation stabilizer in the V.A.E system



Symbol:

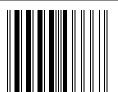
**PD-30** 

Minimum stabilizer can be used in all vehicles equipped in V.A.E system. Device can not be used with other systems (only like on example below)!!!





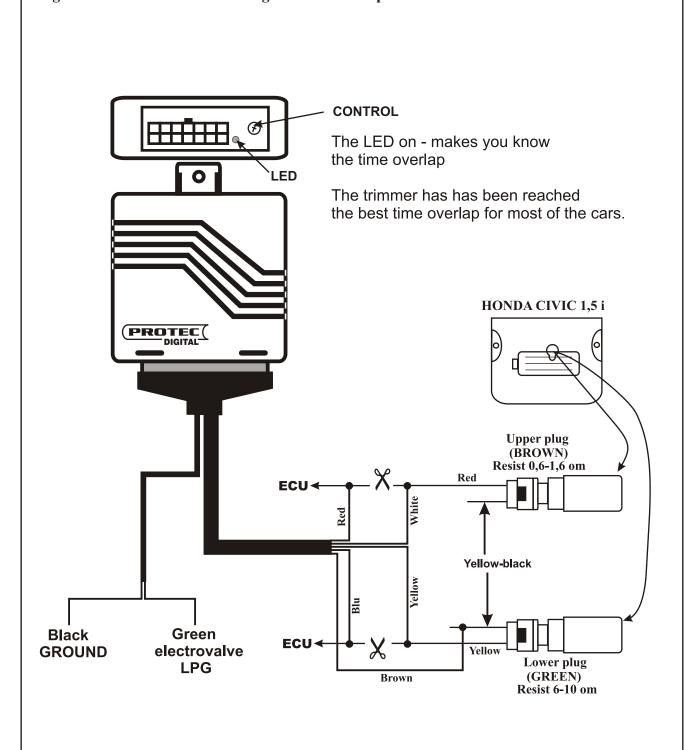
Description: Emulator HONDA CIVIC 1.5i injection Double injector Regulation of sovraposition time wiring system for "cutting"



Symbol:

**PD-44** 

Emulator is designed for HONDA CIVIC 1.5i (BI-INIETTORE) engines. Regulation trimmer is used for regulation of sovraposition time.





Emulator KE-JETRONIC for mechanical injection BOSCH KE-JETRONIC



Symbol:

**PD-45** 

Emulator PD-45 is used "to block" petrol injection in all vehicles equipped in **BOSCH KE-JETRONIC. CONTROL INDICATOR** PROTEC DIGITAL **MERCEDES** AUDI / VOLKSWAGEN red white yellow purple sensor of petrol pressure **ATTENTION!** Numbers which have been written on sensor of **Black** Green petrol pressure should be **GROUND** taken under consideration electrovalve LPG

not numbers on plugs

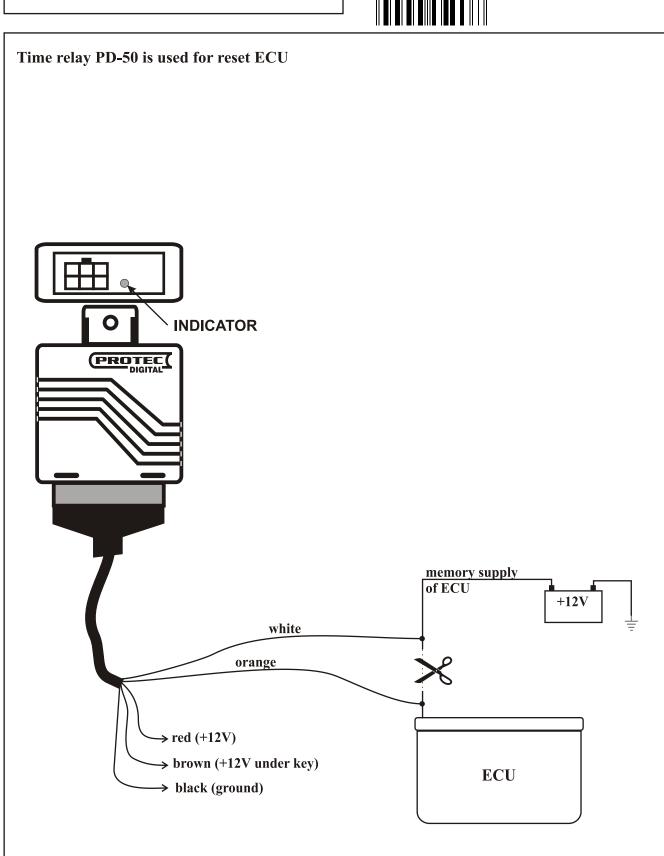


Time relay for reset ECU



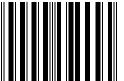
Symbol:

**PD-50** 



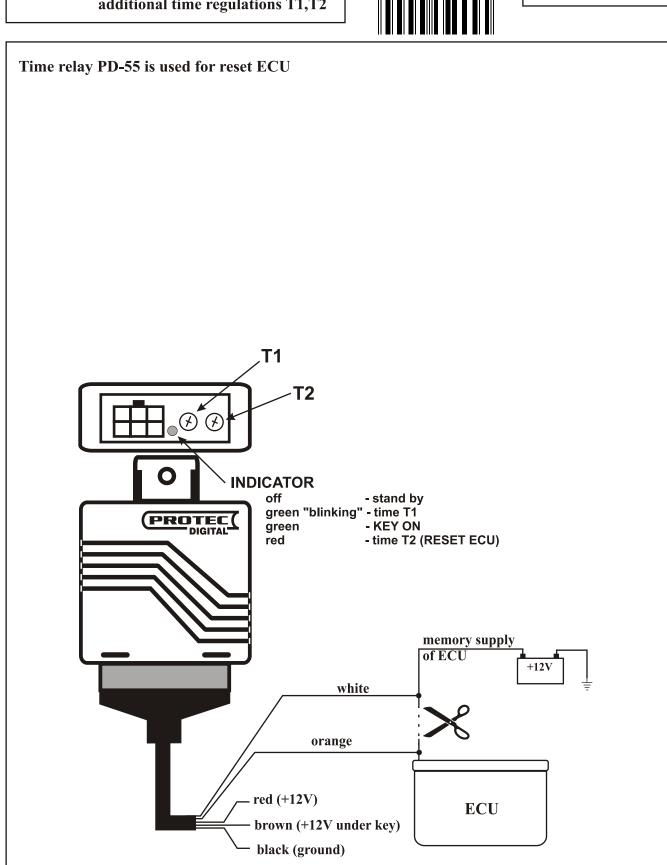


Time relay for reset ECU complex version additional time regulations T1,T2



Symbol:

**PD-55** 



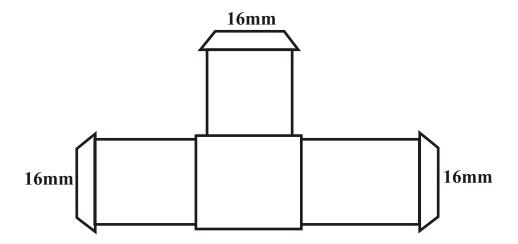


**T-connection 16x16x16 mm** 

Symbol:

T-1

T-connection is made of from high quality plastics which is resistant to high temperature, oils, greases, cooling agents etc.





T-connection 19x19x16 mm

Symbol:

**T-2** 

T-connection is made of from high quality plastics which is resistant to high temperature, oils, greases, cooling agents etc.

