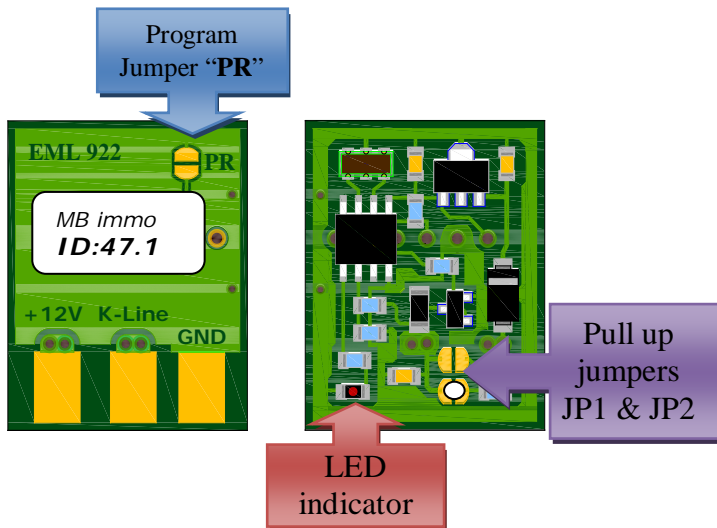


## EML922/471 *MB Infra-red immobilizer emulator without CAN*

*Used in MB cars with infra-red immobilizer, without CAN bus*



### **EML922/471 jumpers and wire terminals description:**

Program jumper “PR” – not used

One pull up jumper must be set (JP1 and JP2 is equivalent)

LED indicator flash once after power on

[+12V] - power supply

[K-Line] - Data wire, connected to engine ECU .

[GND] - Ground.

### ***How to recognize what the immobilizer system is used in the car?***

1. If rear view mirror have red and green led's – it's infra-red immobilizer system (but it can be with CAN or without CAN bus)
2. Immobilizer box have two connectors: 12 pin and 2 pin. If a two-pin connector plugged one wire – means that immobilizer without CAN, if two green wires – means with CAN.

### ***Most popular MB engine ECU, where used immobilizer system without CAN:***

1. **Lucas 2.2 diesel** (55 pin one socket) , used in E-class W210. Pin description: 47-ignition, 19-ground, 13-immo line.
2. **Siemens Hybrid 1.8L, 2.0L, 2.3L** gasoline, used in C-class W202. Inside ecu installation not available.
3. **Bosch Hybrid 2.0L** gasoline, used in C-class W202. Inside ecu installation not available.

### ***Infra-red immobilizer pin description:***

12way connector: 1-Ground, 9-Ignition, 5,6 - red/ green LED on the mirror.  
2 way connector with one wire – immo line.

### ***Emulator installation near immobilizer box:***

Connect “+12V” emulator terminal to immobilizer pin 9, “K-Line” terminal to immobilizer immo line wire (line must be disconnected from immobilizer), “GND” from emulator to immobilizer pin 1. Finally cut immobilizer pin 5 and 6 to disabling red and green LED's.