

## **PIN Entry Plug (PEP) For Renault Models**

Version 2

***Applicable to:*** ***Clio 2 Phase 1 Models (1997 to 2001 approx.)***  
***Kangoo, Trafic, Master and other commercials (1997 to 2001 approx.)***  
***Various Vauxhall commercials based on the above***



### **What it Does**

All the models above feature a 4 digit immobiliser over-ride code, which is able to disarm the immobiliser in the event of a transponder key problem. However, unlike earlier Renault models, this PIN code cannot be entered manually. It must be entered using diagnostic equipment, using the OBD (On Board Diagnostic) socket.

The PEP plugs into the OBD socket and has two modes of operation:

#### ***1, Manual Mode***

The PEP takes a manually entered PIN code, which is entered using the red tactile switch on the left hand side. The PIN Code is entered in the same manner as used on earlier Renault vehicles with Infra Red locking systems. It then converts this into a diagnostic message, allowing the immobiliser to be disarmed, assuming the PIN code was correct. In this mode, the PEP can be used as a diagnostic tool, for example, for vehicle recovery.

Once the car has been started, and ignition has been turned off, the immobiliser will self-arm again, in the usual fashion, and the PIN will need to be manually entered once more.

#### ***2, Automatic Mode***

The PEP can be locked to a particular PIN Code, in such a way that every time the car's ignition is turned on, the PEP will automatically send the same PIN Code to disarm the immobiliser. There is no limit to the number of times this can be done. Once the ignition is turned off, the immobiliser will self-arm after a few minutes delay and the security LED will begin to flash. The PEP can be removed from the vehicle, or left in the OBD socket. In either case it will remember the stored PIN Code, and it won't need to be manually re-entered.

The PEP is small enough to be left in place in the OBD socket, and the ashtray replaced, on Clio 2 models.

## **Operation**

### ***Manual Entry of the PIN***

You can enter a PIN into the PEP in the same manner as an earlier infra red Renault system, i.e:

Turn the ignition on, and insert the PEP into the OBD socket. The order in which you do this isn't important. The blue LED on the PEP will start to flash rapidly to indicate that the PEP is waiting for manual entry of the PIN.

Press and hold down the red button on the PEP. The LED will flash slowly. Hold the button down until you've counted the correct number of flashes for the first digit of the PIN code, for example if the first digit is 4, only release the button after 4 flashes of the LED.

Enter digits 2, 3 and 4 of the PIN Code the same way. If you get a number wrong, you can always pull the PEP out of the OBD socket and start again.

Once you've released the button on the PEP at the end of the last digit, there will be a short (about 2 seconds) delay, whilst the PEP communicates with the car.

If you've got the correct PIN, the red security LED on the car should then come on solidly for a few seconds, and the car can then be started.

If the PIN you entered was incorrect, the red security LED on the car will continue to flash, and the blue LED on the PEP will flash twice every second or so, to indicate the PIN was wrong.

In this case, turn ignition off and back on again, to try again. You then have 2 more attempts to enter the PIN before the vehicle locks you out for a period of about 15 minutes.

If there's a problem with the vehicle, and the PEP can't communicate with it, the LED on the PEP will flash, but more slowly than normally.

### ***Locking the PEP into Automatic Mode.***

Enter the PIN manually in the manner described above. If you've entered the correct PIN, the blue LED on the PEP will come on solid for a few seconds.

Wait for the blue LED on the PEP to go out.

Within 10 seconds of the LED going out, press and hold down the button on the PEP. Hold it down for a few seconds, until the blue LED starts to flash quickly, and then release the button.

The PEP is now locked to the PIN code that you just entered.

To test that automatic mode is working correctly, turn the ignition off, and wait for the immobiliser to self arm again. This takes about 5 minutes, and is indicated by the red security LED on the instrument pack starting to flash again.

When this happens, turn the ignition back on. The red security LED should flash a couple of times, and then come on solid for a few seconds. As soon as the LED comes on solid, the car can be started.

The PIN Code which is now memorised by the PEP is stored permanently, will be retained if the PEP is disconnected from the car, or if the car's battery is replaced.