

A.D.S

AUTOMOTIVE DIAGNOSTIC SERVICES

The Record / Playback Module For Renault Models

Version 1.0

Applicable to: *All Renault models, fitted with single-data-wire coded immobilisers. I.E. from 1994 approx. until the introduction of CAN (2001 to 2003, depending on exact model).*

General

- If you can disarm the immobiliser once, you can disarm it permanently.
- Only 3 wires to connect: Ignition, Ground and Data.
- Small, matchbox sized module.
- Module is designed to be left permanently connected to the car.
- Non-volatile memory means no data loss, even after flat batteries or jump starts
- Module can re-learn data, and so can be reused if required.

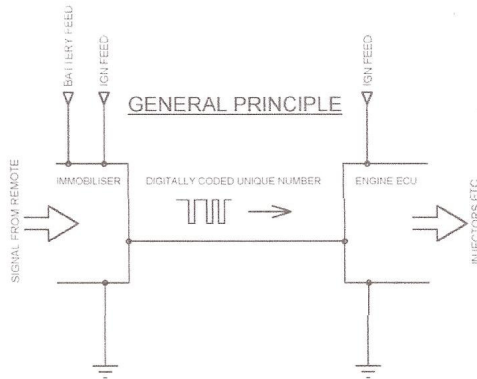


As the name suggests, the Renault Record / Playback Module (or RPM) is capable of 'learning' a particular immobiliser data stream from a car. It can then play this data back, every time ignition is turned on, meaning that you have a car which simply starts, even just using a steel (non electronic) key.

Generally, you can get the immobiliser to send its data to the engine ECU by either entering an override PIN, or by making a temporary repair to the remote control system. Alternatively, the RPM can be programmed directly to a specific code, using a PC based tool. Exact details vary by model and system fitted.

Note that once the RPM is fitted to a car, the original equipment immobiliser is effectively disabled. You need to make your customer aware of this, so that they can arrange to fit an alternative device as required.

Technical:



Most Renault immobilisers feature an over-ride PIN, which allows the system to be disarmed in the event, for example, of remote control failure.

Some systems allow the PIN to be entered manually, using the central locking button, whilst later systems need diagnostics.

Whatever method is used to disarm the system (including just making a temporary repair to the remote or the receiver), the RPM is capable of recording the data sent, as long as it is connected as shown on the right.

The RPM has two LEDs to show its status:

Yellow LED ON: the RPM is in record mode, and is waiting for data.

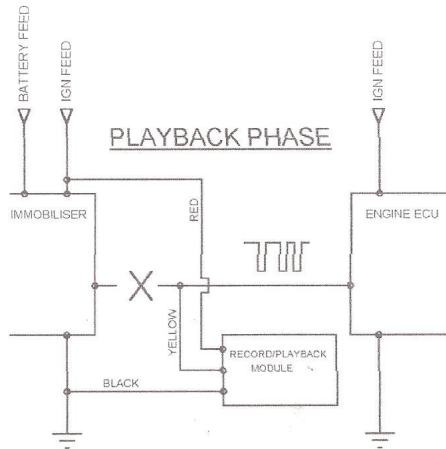
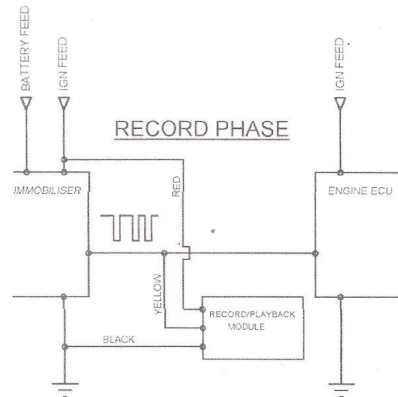
Green LED ON: the RPM is in record mode, it has captured good data, and has stored it in memory.

All Renault immobilisers of this type share the same features:

The engine ECU won't run the engine until it receives a coded message (a 'unique' number) from the immobiliser. The 'unique' part means that every immobiliser is different, and so swapping immobilisers won't help get a car running.

There is no starter motor cut on Renault models.

The immobiliser may be a stand alone unit, or it may be built in to a larger control unit.



Once the immobiliser data stream has been recorded, the RPM can be put into playback mode.

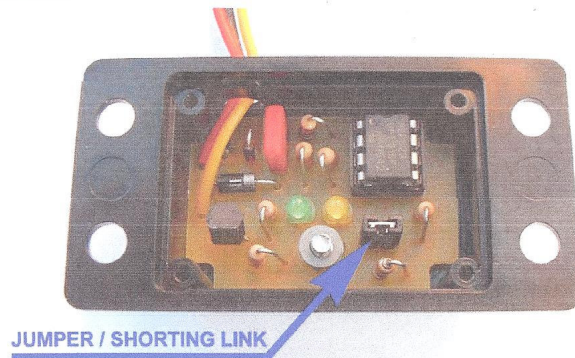
This is done by simply taking a selection jumper off the circuit board. Have a look at the photos on the next page.

The next time that ignition is turned on, the RPM transmits the data that would have been sent by the immobiliser.

Both the green and yellow LEDs will blink to show that data is being sent.

In order to stop the immobiliser from interfering with the signal from the RPM, the data wire needs to be cut, in the location shown by the 'X'.

Fitting Process:



RPM shown with the back cover off

1. Ensure that you can disarm the immobiliser in some way
2. Connect the RPM to the car's wiring harness: Red wire to ignition feed, black wire to earth, and yellow wire to the data wire
3. Ensure the jumper / shorting link is fitted. This puts the RPM into record mode.
4. Turn ignition on. If you need to enter the PIN, do it now. The yellow LED should come on whilst the RPM is waiting for data. Once good data has been saved, the yellow LED will go out and the green LED will come on.
5. Turn the ignition off
6. Remove the jumper. This puts the RPM into playback mode.
7. Cut the wire to the immobiliser, so that the RPM is connected directly to the engine ECU, and the immobiliser is out of the circuit.
8. Turn ignition back on. The green and yellow LEDs should both blink rapidly, as the RPM plays back the data. The car should now start.
9. Screw the back on the RPM.

These are general fitting instructions. Specific instructions for a number of vehicles, which include immobiliser pin-outs, are also available from us on request.

This product will only be sold to trade professionals.

A.D.S is not to be held responsible for the incorrect installation of any of these products or for damages of any type seen after the installation.

These types of products are to be fitted by qualified persons only