



Achieve the impossible

Abrites or Jaguar/ Land Rover  
**User Manual**

Version: 1.1

[www.ABRITES.com](http://www.ABRITES.com)

## List of revisions

Date	Chapter	Description	Revision
01.10.2015	ALL	Document created	1.0
13.06.2017	8	Immo Advanced	1.1

1. Introduction
2. Using the Abrites diagnostic for Jaguar/ Land Rover
3. Standard Diagnostics
4. Special Function Key learning
5. Special Function Cluster calibration
6. Special Function NV DATA
7. Special Function Flash
8. Special Function "Immo Advanced"

## 1. Introduction

“Abrites Diagnostics for Jaguar/ Land Rover” is a Windows PC based diagnostic software for Jaguar/ Land Rover vehicles. With the help of this software you can perform complete diagnostic operations of all vehicles.

For proper operation of your diagnostic software you will need a corresponding interface for connection between your PC and vehicle named “AVDI”.

AVDI is an interface produced by Abrites Ltd. intended to act as an interface between the PC and the electronic control units.

AVDI should be used with ABRITES software produced by Abrites Ltd.

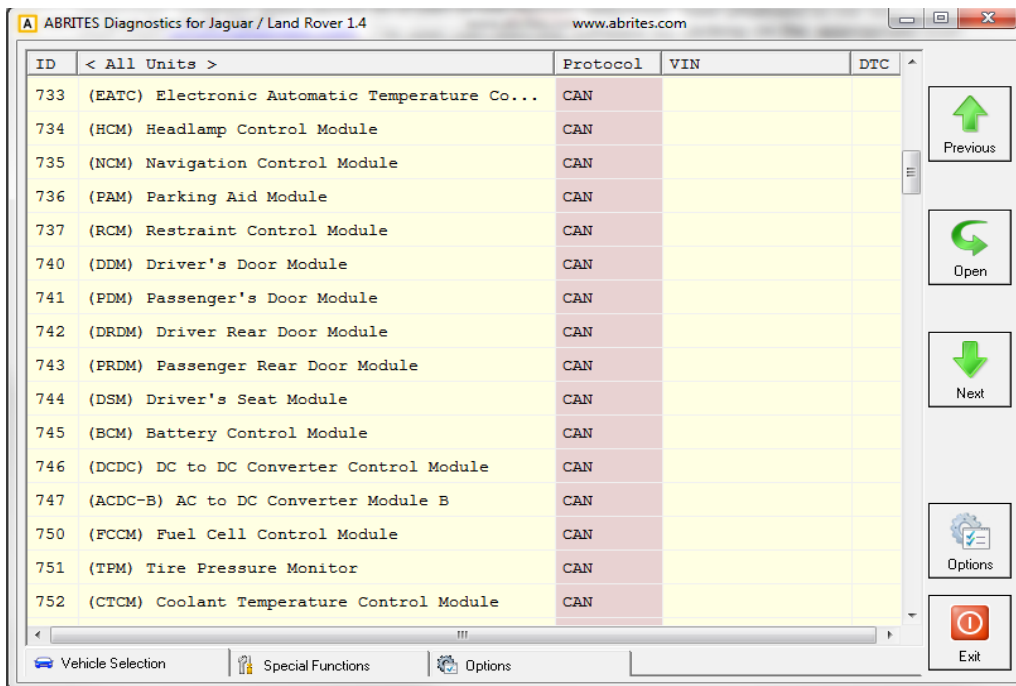
*ABRITES is a trade mark of Abrites Ltd.*

ABRITES Diagnostics for Jaguar and Land Rover provides the user with the ability to perform dealer-level diagnostic functions, such as module identification, both basic and detailed, reading of diagnostic trouble codes (DTCs), clearing of DTCs and many others.

## 2. Using the Abrites diagnostic for Jaguar/ Land Rover

The Abrites diagnostics for Jaguar/ Land Rover is installed together with the rest of the Abrites diagnostic software applications as a part of the Abrites diagnostic suite provided to the user via e-mail. The user can start the software by clicking on the appropriate icon from the Abrites “Quick start” menu.

Once the Jaguar/ Land Rover icon is selected the software will start and the user will see the following screen:

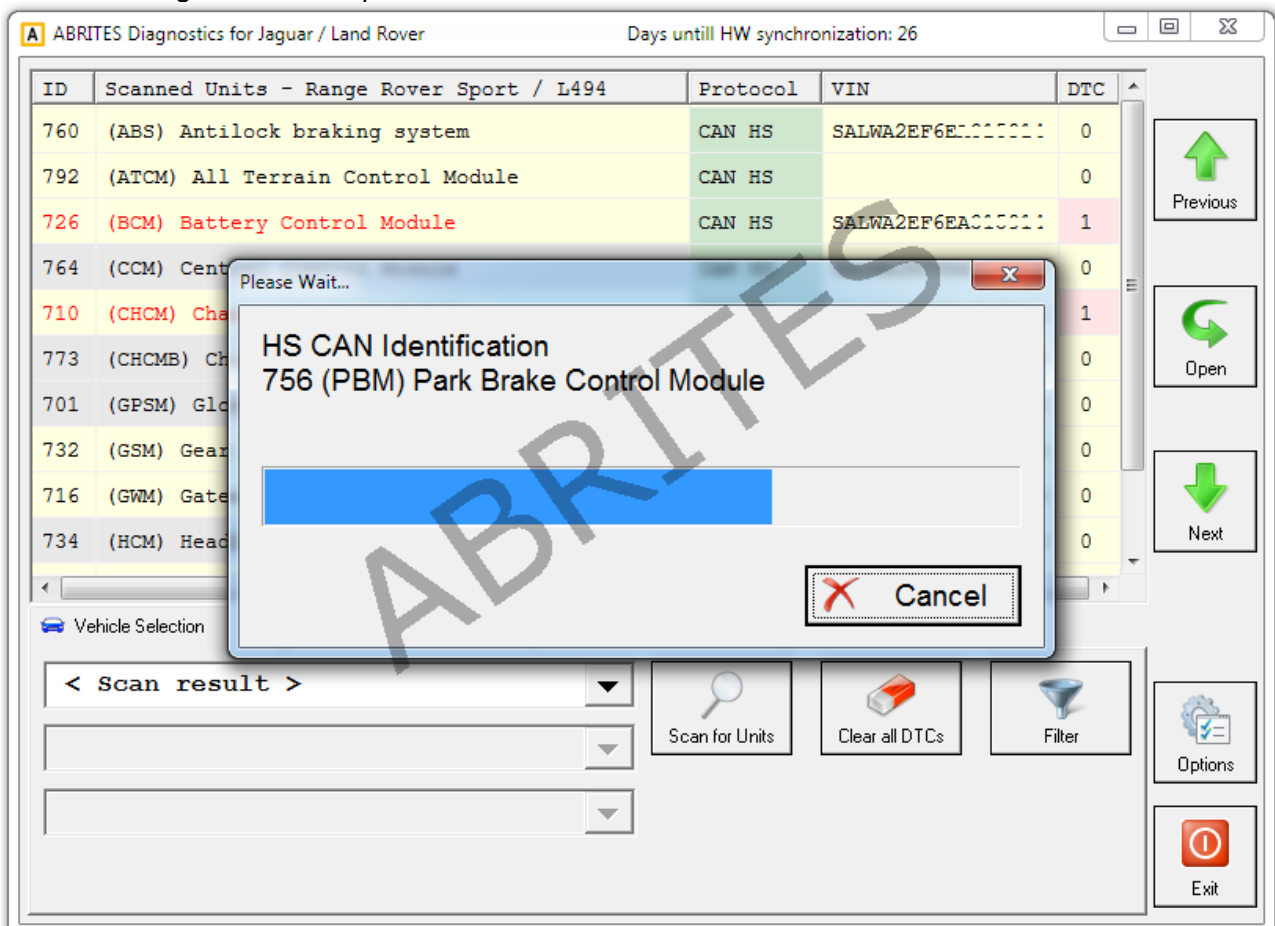


This is the main screen of the software and it shows all the navigation buttons as well as the ones for vehicle selection, scanning and general diagnostic.

### 3. Standard Diagnostics

Standard diagnostics within the context of the Abrites diagnostics for Jaguar and Land Rover refers to functions such as device scanning for all the electronic control modules incorporated in the supported vehicles, reading of the identification data for all the modules, reading and clearing diagnostic trouble codes as well as service functions.

- Device scanning allows the user to connect to the electronic modules of the vehicle and see the identifications for the them, the amount of diagnostic trouble codes for each one as well as the VIN numbers assigned to the separate units.

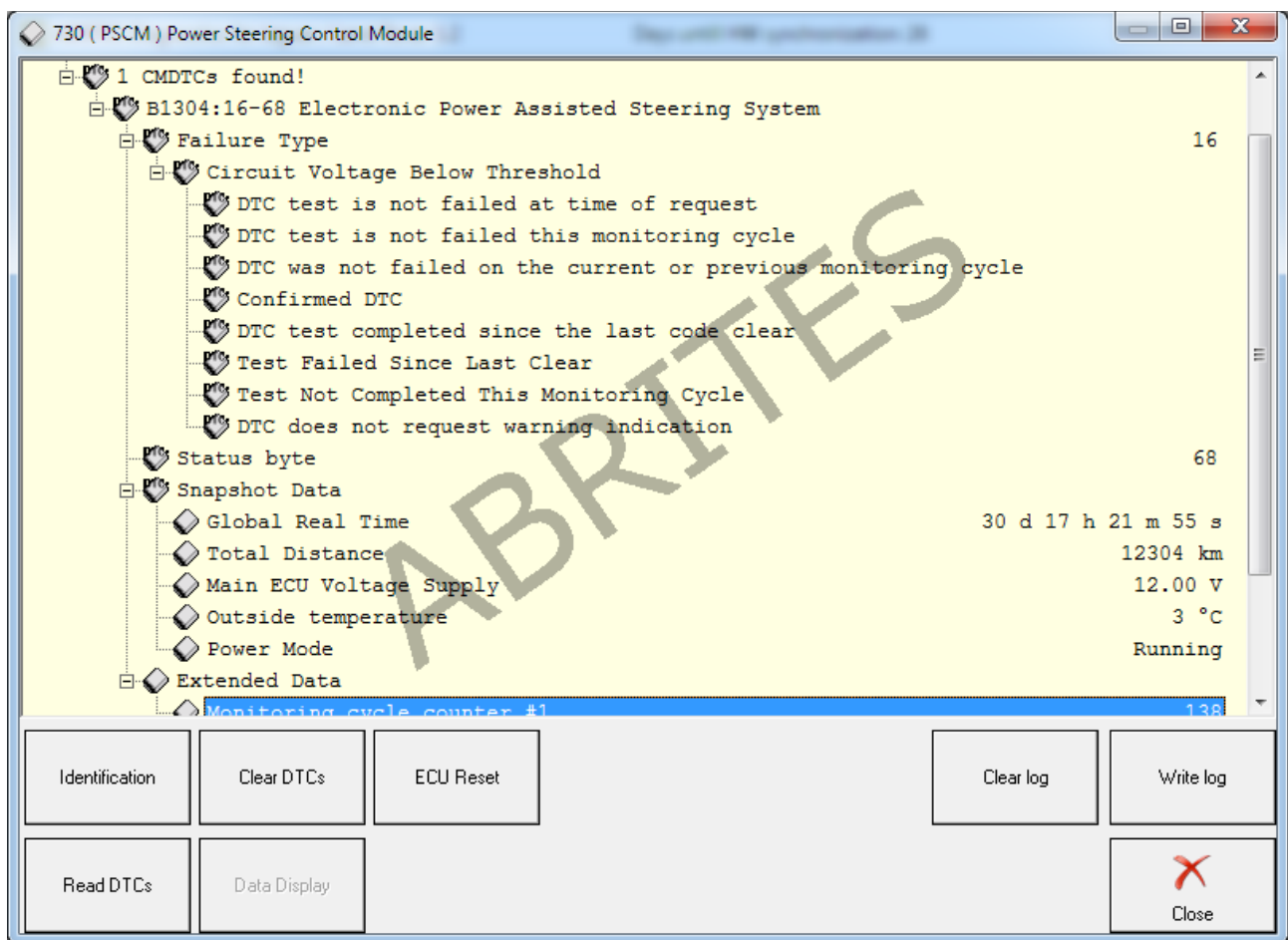


Once the scan is completed the details are displayed in the main window:

ID	Scanned Units - Range Rover Sport / L494	Protocol	VIN	DTC
760	(ABS) Antilock braking system	CAN HS	SALWA2EF6EAC10011	0
792	(ATCM) All Terrain Control Module	CAN HS	SALWA2EF6EAC10011	0
726	(BCM) Battery Control Module	CAN HS	SALWA2EF6EAC10011	1
764	(CCM) Central Control Module	CAN HS	SALWA2EF6EAC10011	0
710	(CHCM) Chassis Control Module	CAN HS	SALWA2EF6EAC10011	1
773	(CHCMB) Chassis Control Module B	CAN HS	SALWA2EF6EAC10011	0
701	(GPSM) Global Positioning System Module	CAN HS	SALWA2EF6EAC10011	0
732	(GSM) Gear Shift Module	CAN HS	SALWA2EF6EAC10011	0
716	(GWM) Gateway Module A	CAN HS	SALWA2EF6EAC10011	0
734	(HCM) Headlamp Control Module	CAN HS	SALWA2EF6EAC10011	0
720	(IPC) Instrument Panel Control Module	CAN HS	SALWA2EF6EAC10011	0
736	(PAM) Parking Aid Module	CAN HS	YYYYYYYYYYYYYYYY	0
756	(PBM) Park Brake Control Module	CAN HS	SALWA2EF6EAC10011	0
7E0	(PCM) Powertrain Control Module	CAN HS	SALWA2EF6EAC10011	0
730	(PSCM) Power Steering Control Module	CAN HS	SALWA2EF6EAC10011	1
737	(RCM) Restraint Control Module	CAN HS	SALWA2EF6EAC10011	0

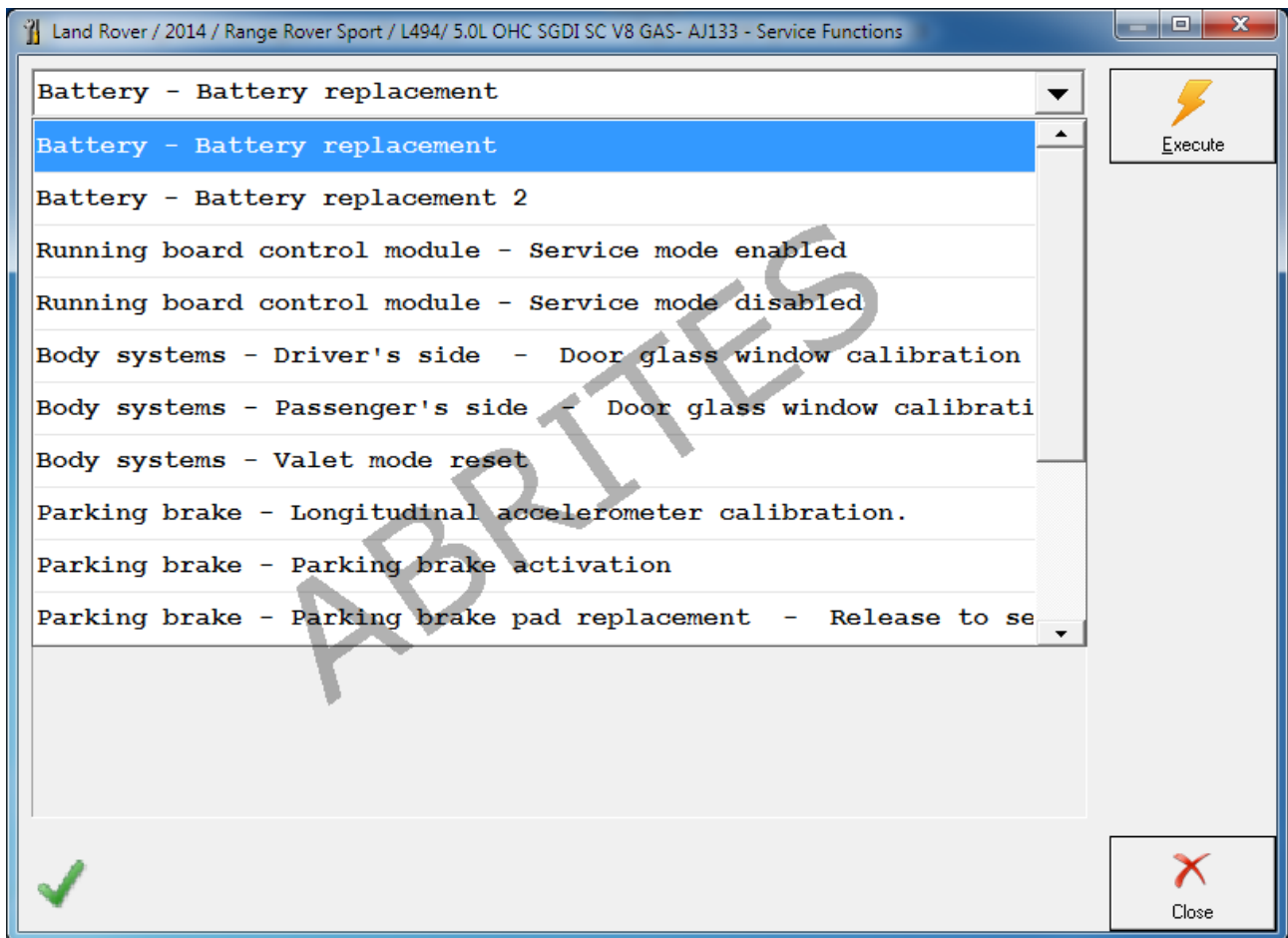
- Diagnostic trouble codes and live data monitoring

When the initial connection with the vehicle is established the user can select an electronic module and enter by clicking over it. In the following screen the full identification of the module can be displayed. Also the DTCs will be shown together with the live data from the vehicle.



- Performing service functions for the Jaguar/ Land Rover vehicles

This function allows the user to complete the process of the vehicle service or maintenance by registering their modification into the vehicle's ECUs. This functionality also allows the calibration of modules, and testing on them.



## 4. Special Function Key learning

“Key learning” is a function dedicated to the learning of keys to Jaguar/ Land Rover vehicles by the On Board Diagnostics port (OBD).

The vehicles currently supported by this function are described below:

Land Rover:

Evoque (L538) - 2011- 2014

Range Rover Sport (L494) - 2013- 2014

Range Rover (L405) - 2012 – 2014 (incl.long wheel base)

Discovery LR4 – 2010-2014

Freelander 2 (L359) - 2006–2014

Jaguar:

F-Type Convertible and Coupe 2013-2014

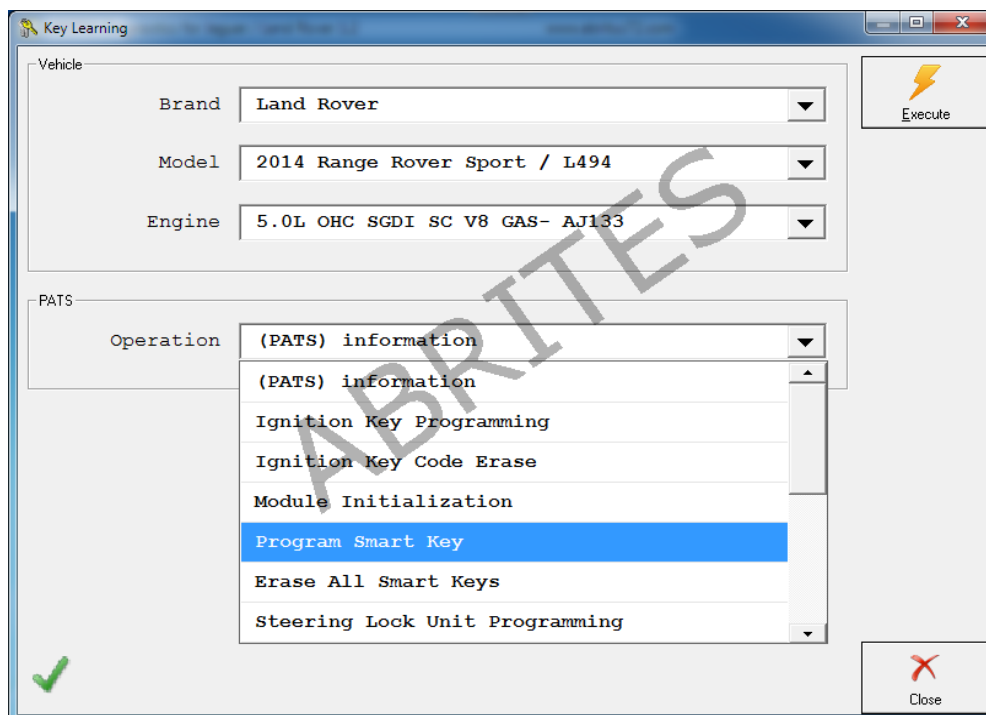
XF (X250) - 2007 – 2014

XJ (X351) - 2010 – 2014

XK (X150) - 2010 – 2014

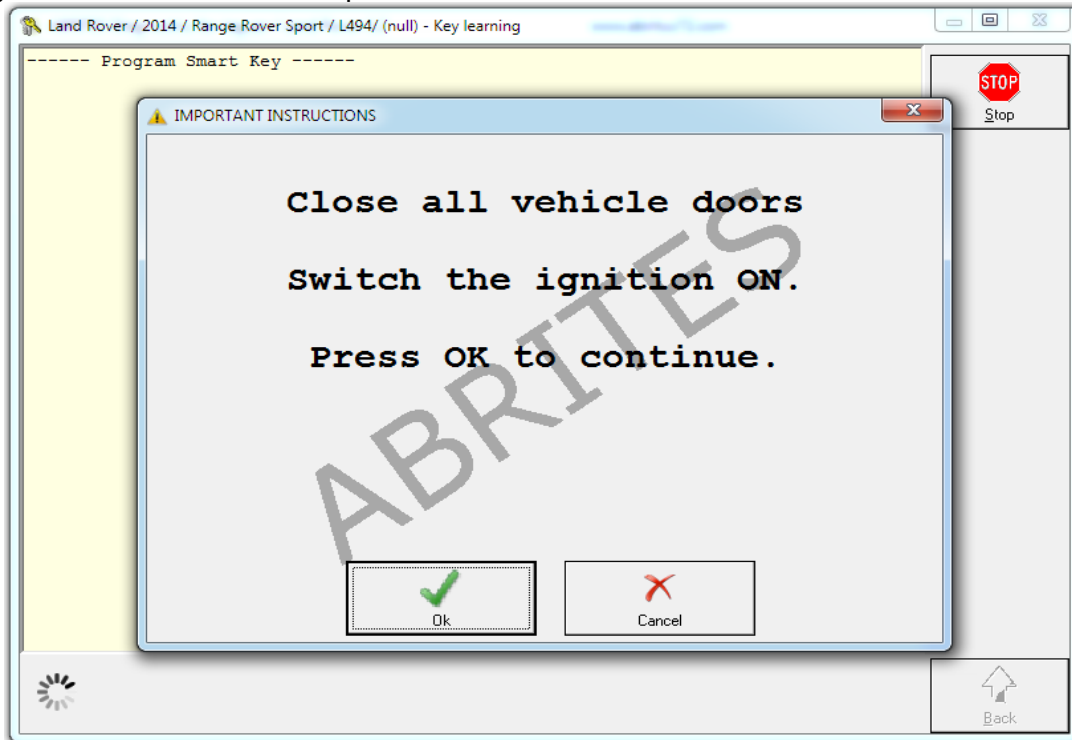
The procedure for key learning should start after a diagnostic connection to the vehicle is established and the icon for it is clicked.

The first step is to select the vehicle and the requested operation:

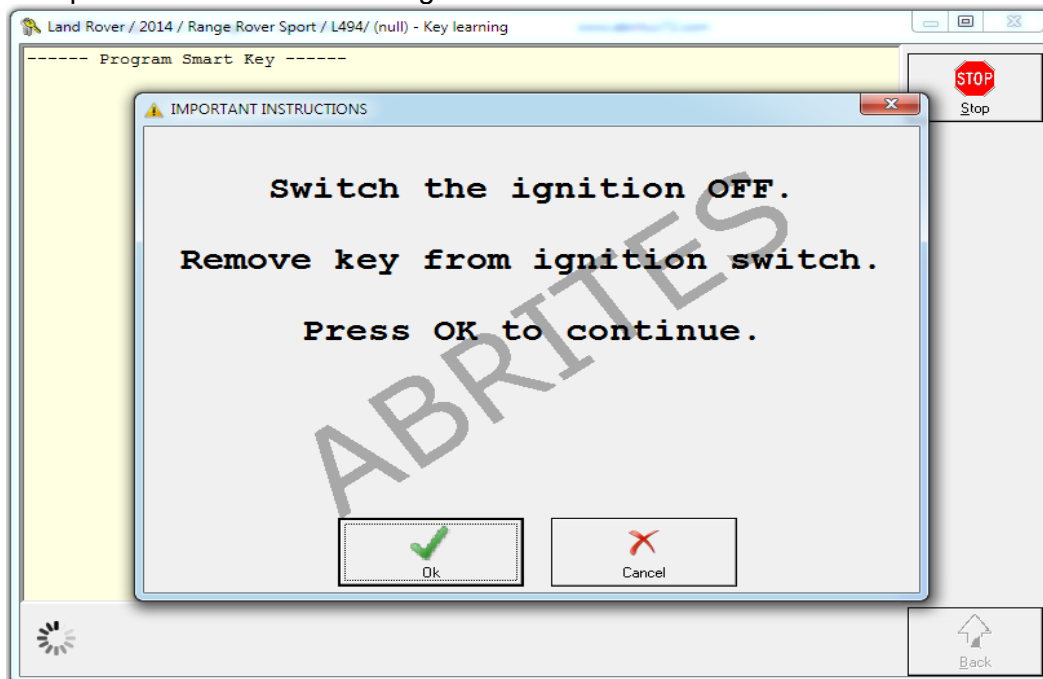




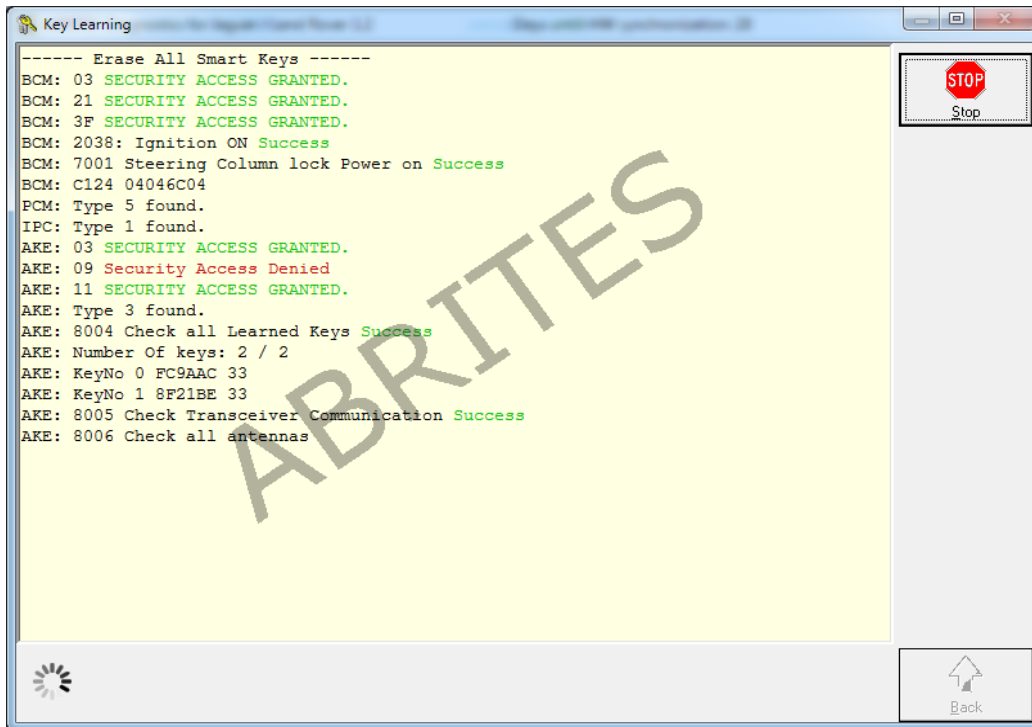
After that the software will start the on screen guidance. Please follow the steps and place the key in the ignition and set it to the **ON** position:



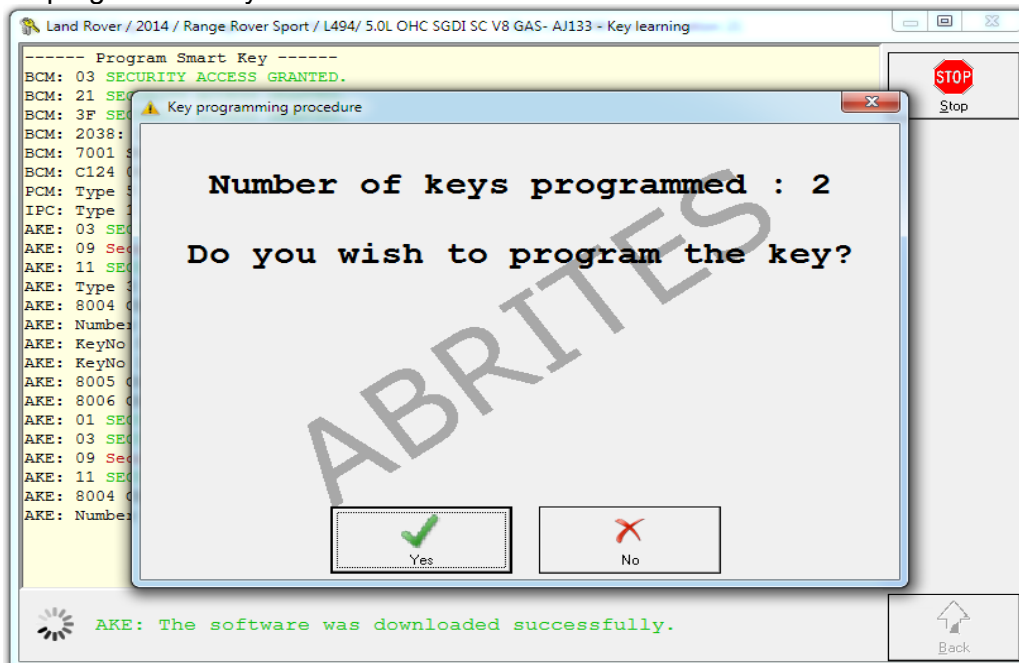
Again, the steps are shown in the message boxes on the screen.



The software will perform the key calculation and provide detailed information about all the steps taken:



Once the calculation is completed the software will inform you about that and will ask you if you would like to program the key.



## 5. Special Function Cluster calibration

Cluster calibration is a function dedicated to the calibration of electronic units after an exchange with a used unit. Please note that the calibration needs to be done in coordination with local laws.

Vehicles supported for cluster calibration include but are not limited to:

Land Rover:

Evoque (L538) - LL and HL July 2011- 2014 (2dr and 4dr)

Range Rover Sport (L494) - 2013- 2014

Range Rover (L405) -2012 – 2014 (including long wheel base models)

Jaguar:

F-Type Convertible and Coupé 2013-2014

XF (X250) - 2007 – 2014

XJ (X351) - 2010 – 2014

XK (X150) - 2010 – 2014

The procedure for cluster calibration should start after a diagnostic connection to the vehicle is established and the icon for it is clicked.

1. Select the Electronic Control Unit that needs to be calibrated and click “read”:



2. Input the appropriate value in the “new” window and press update:

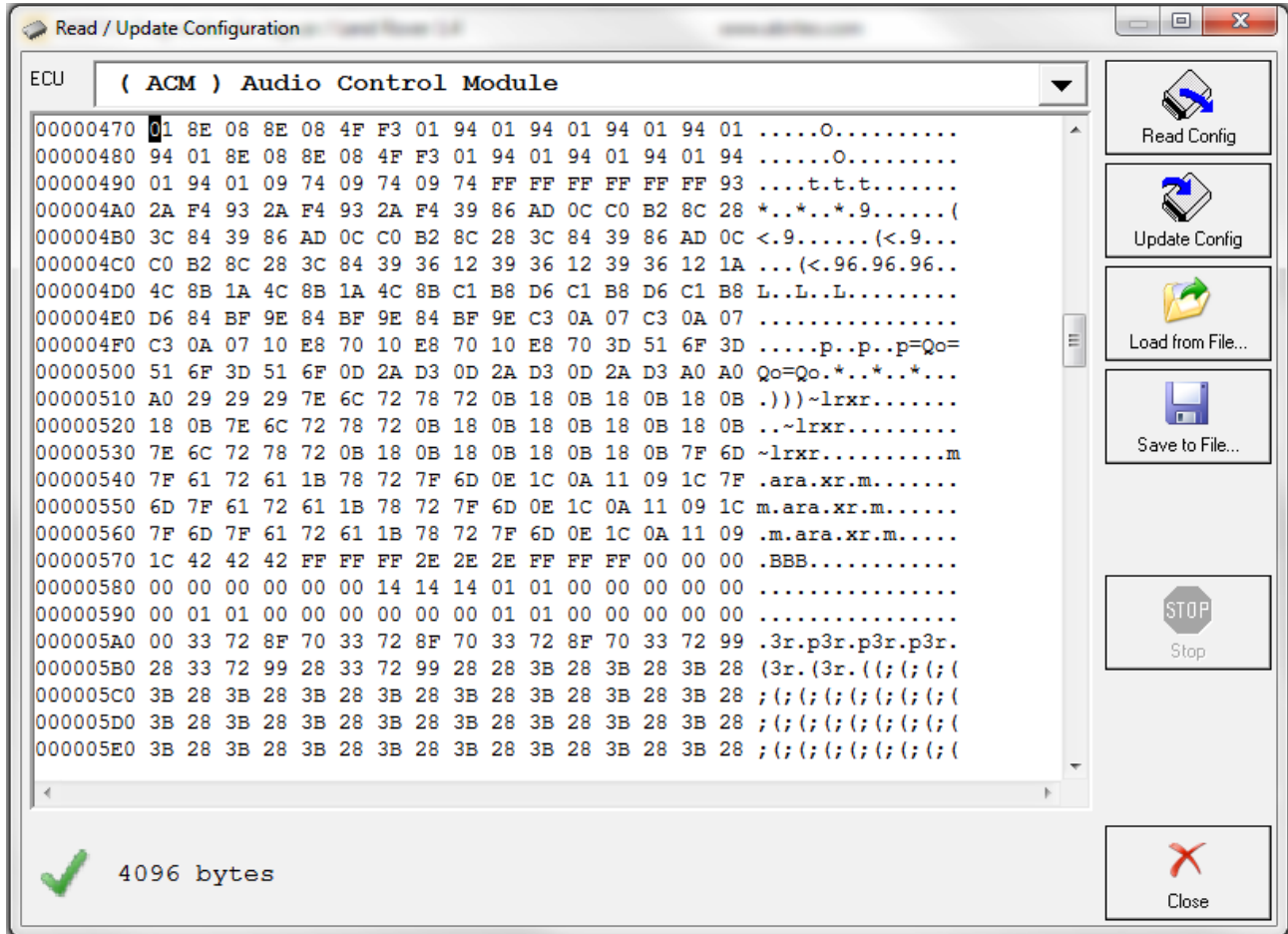


3. Confirm that the correct value is set and close the window:



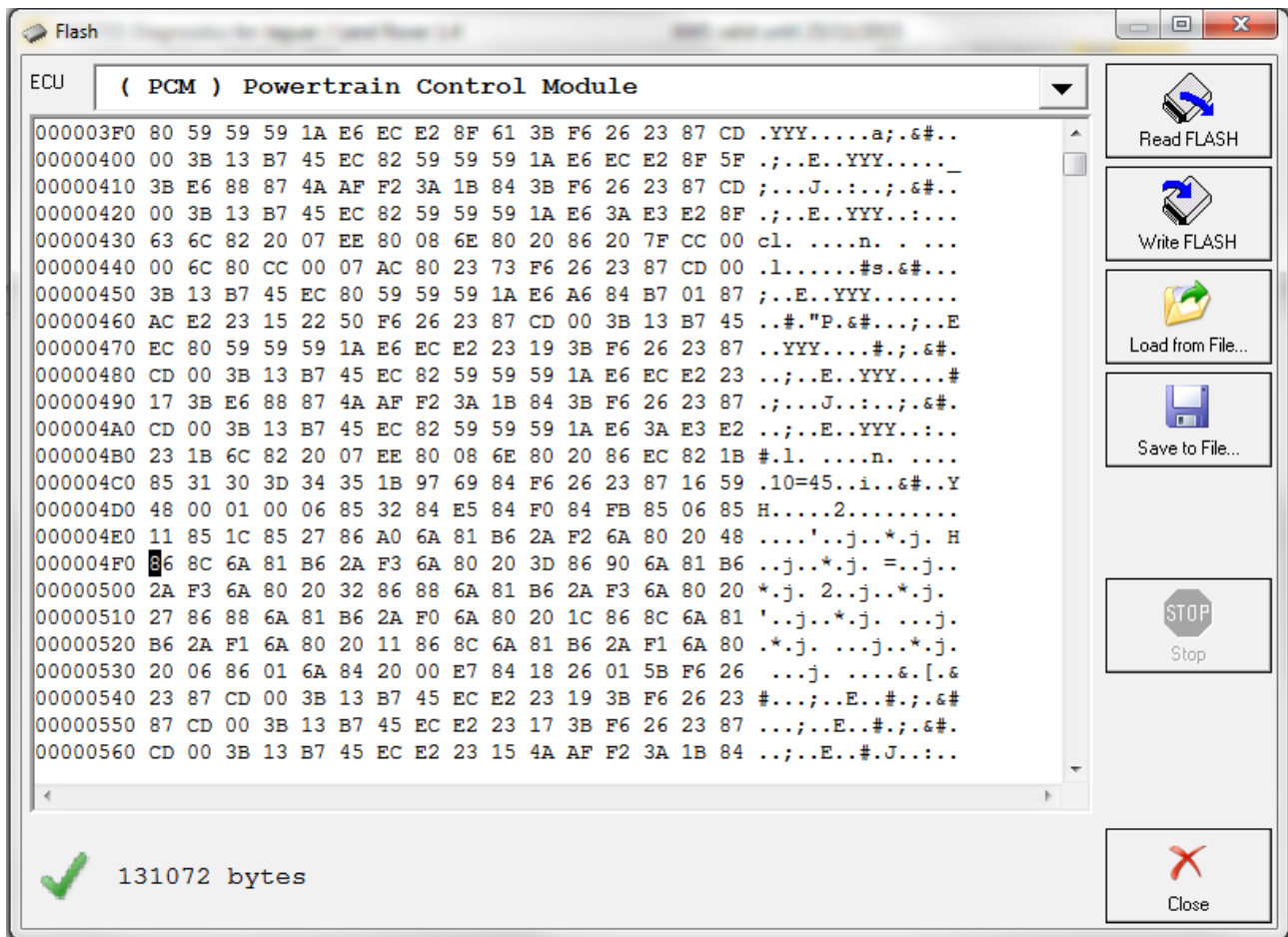
## 6. Special Function NV DATA

This function is used for reading, saving and updating of the Configuration data of the modules within Jaguar and Land Rover vehicles. It is particularly useful for cases where module exchange is required.



## 7. Special Function Flash

Special Function Flash is used in the cases where the flash file of a module within the vehicle needs to be read, saved or updated. It is used for module replacement as well as flash tuning.



## 8. Special Function "Immo Advance

The "Immo Advanced" special function allows the user to write the transponder ID and the secret key ID in the car's BCM.

After that you the engine can be started with a key and moved to an emergency slot. The keyless start of the engine won't be possible. Writing in the KVM (Keyless Start Module) is also not possible. If the KVM is locked, writing by OBD won't be possible as well.

### 1. Select the mod

### 2. Keys scre

### 3. SK Scre

### 4. Ignition Scre