

Handbook



Via Torino, 16 - 15020 GABIANO (AL) - ITALIA

E-mail: <u>support.race@dimsport.it</u> Release valid until version of Race EVO 7.00.415 Build 119 Version GOS Genius 4.024 Build 009 04th August 2008



	GENIUS HANDBOOK	04th AUGUST 2008
Handbook		1
1 INTRODUCTION		3
2 TECHNICAL SPECS		3
3 GENIUS BAG KIT		4
4 CONNECTIONS, PORTS	AND LED	9
5 HARDWARE REQUIREN	IENTS	10
6 DRIVER INSTALL		10
7 BASIC TASKS		11
8 MAIN MENU		12
9 WORK MENU		13
9.1 ECU ID		13
9.2 Serial reading		15
9.3 Serial Writing		16
9.4 Diagnosis		18
9.5 Index		18
10 TOOLS MENU		20
10.1 Setup		20
10.2 Explore SD		22
10.3 Test		23
11 INFO MENU		23
11.1 Protocols		24
11.2 Info Genius		24
11.3 Features		25
12 STANDBY		25
13 PC CONNECTION		26
13.1 Hardware connection	on	26
13.2 Software connection	on	27
13.2.1 Join/Export file		28
13.2.2 File for the Tecl	hnical Support	31
13.2.3 Update		32
13.2.4 File ID		33
13.2.5 Genius Info and	l protocols	34
14 AVAILABLE PROTOCO	DLS	36
15 WIRING LIST		39
APPENDIX A (Special App	olications)	51
APPENDIX B (Specific Pro	ocedures)	53
APPENDIX C – VAG COUI	NTER RESET	58



1 INTRODUCTION

GENIUS is the first Touch&Map tool allowing the serial reading and programming of the memory of the ECU (electronic control unit) managing the vehicle engine.

Its STAND ALONE conception and its TOUCHSCREEN panel make it a unique tool. Being an INDEPENDENT tool, Genius does not need to be connected to a PC during the reading and the programming procedures, thus avoiding dangerous blocks or slowdowns caused by the multitasking operative system of the PC. Moreover it is a particular easy and user-friendly tool thanks to its practical TOUCHSCREEN panel.

To grant the highest standards of safety, GENIUS is equipped with a battery which – should an accidental disconnection from the OBDII socket happen during programming – allows to easily restore the communication with the ECU, as all the DIMSPORT-branded serial programming protocols grant. This new revolutionary tool supports **CAN systems**, too, other than **K LINE, L LINE, and J1850**. Genius has a big memory capacity, supplied by a removable 256 Mbyte SD CARD (SECURE DIGITAL), which can be expanded up to 1 Gbyte.

2 TECHNICAL SPECS

LCD 320 x 240 pixel DISPLAY, CCFL backlight, transflective TOUCHSCREEN with Touch Panel 512KByte PROTECTED FLASH MICROPROCESSOR MEMORY 16MByte RAM MEMORY FILE ARCHIVE MEMORY IN 256 MByte SECURE DIGITAL expandable up to 1Gbyte ALERT LED for SECURE DIGITAL, USB, POWER SUPPLY, DIAGNOSTIC LINE Internal CLOCK with memory and and 3 volt Lithium battery 8.4 volt 600 mAh RECHARGEABLE internal battery 12 volts to 30 volts POWER SUPPLY TENSION COMMUNICATION LINES with diagnostic port K LINE, L LINE, CAN2.0, J1850 USB CONNECTION TO PC





3 GENIUS BAG KIT

The GENIUS BAG includes all the components for the serial programming that are given to the customer when purchasing Genius.

Here below you find the list of all components with its code

RIF.	CODE	DESCRIPTION
1	F32GENIUS	Genius – main device
2	F32GN008	Genius – Obd cable (K-CANBUS- J1850)
3	C32GNALIM12	12volt 110/240V PSU with international plug
4	F32GN002	Genius – Adaptor for compatibility with the old system FLASH 4
5	C32GNPEN	Genius – n.3 Pens for the TOUCH PANEL
6	C32GNUSB01	Genius – USB cable for PC connection
7	F32GN011	Universal wiring for serial programming
8	F32GN003	Genius – Wire to connect to the battery
9	C32GNVAL	Genius – Bag (picture of the full kit)



OPTIONAL

RIF.	CODE	DESCRIPTION
10	F32ALIM12V	PSU 12V SW for VAG TDI cable
11	F32CBATT	+12V battery cable for VAG TDI cable
12	F32FL003P	OBDII wire for PORSCHE M5.2.2
13	F32FL005	Race plug for VAG TDI ECU
14	F32FL002	BMW diagnostic connector + RJ45 wire's adaptor for BMWload
15	F32FL004	Mercedes diagnostic connector
16	F32FL001	FIAT ALFA LANCIA diagnostic connector for serial communication
17	F32FL006	A cables for Bosch ME7.3.1, ME3.1, ME2.1, ME7.3H4 hybrid ECU
18	F32FL007	B cables for Bosch ME7.3.1, ME3.1, ME2.1, ME7.3H4 hybrid ECU

OPTIONAL CABLES 2008

RIF.	CODICE	DESCRIZIONE
10	F32ALIM12V	PSU 12V SW for VAG TDI cable
11	F32CBATT	+12V battery cable for VAG TDI cable
14	F32FL002	BMW diagnostic connector + RJ45 wire's adaptor for BMWload
20	F32GN013	OBDII wire for PORSCHE M5.2.2
21	F32GN015	Race plug cable for VAG TDI ECU
22	F32GN014	Mercedes diagnostic connector cable
23	F32GN023	FIAT ALFA LANCIA diagnostic connector for serial communication
24	F32GN021	A cables for Bosch ME7.3.1, ME3.1, ME2.1, ME7.3H4 hybrid ECU
25	F32GN022	B cables for Bosch ME7.3.1, ME3.1, ME2.1, ME7.3H4 hybrid ECU

















































Dimensione Sport s.r.l.



4 CONNECTIONS, PORTS AND LED

Front Side

- A) 1 USB port
- B) 1 slot for SD Secure Digital card C) 1 green LED for SD: it is
 - it is on and still when the SD card is plugged in
 - It blinks when file are being saved on the SD card
- D) 1 green LED for USB:
- it blinks when Genius is communicating with Race EVO



Back Side

- E) 1 Diagnostic Port to plug the OBD cable or the universal wire for serial connection
- F) 1 DC IN connector to connect to the 12 Volt 110/240 V PSU
- G) 1 green LED "data transfer": NOT YET FUNCTIONING
- H) 1 red LED for ext power: it's ON when Genius is powered



Bottom Side

I) 1 RESET button (to be used ony upon request of the technical support- i.e Genius is not responding -)

L) 1 button to open the SD reader (to be opened and removed ony upon request of the technical support: with a tipped tool carefully press the hole marked in the picture below as far as the cover is open. To remove the SD card press slightly the card as far as there is a click, then release the card.





The bottom part of Genius is equipped with:

- M) 4 anti slide rubbers
- N) 1 removable hand grip to hold Genius while working



5 HARDWARE REQUIREMENTS

- RaceEVO, (always updated in manu Update --> Race Update)
- 1 USB port
- Operating System Windows 2000 or XP

6 DRIVER INSTALL

After plugging for the first time Genius to the PC it is necessary to follow the procedure below:

1) Select "Yes, this time only" and click Next

Found New Hardware Wizar	d	
	Welcome to the Found New Hardware Wizard	
	Windows will search for current and updated software by looking on your computer, on the hardware installation CD, or on the Windows Update Web site (with your permission). <u>Read our privacy policy</u>	
	Can Windows connect to Windows Update to search for software? Yes, this time only Yes, now and givery time I connect a device No, not this time	
	Click Next to continue.	
	<back next=""> Cancel</back>	



2) Select "Install the software automatically (Recommended)" and click Next.



3) Click on "Continue Anyway" and then "Finish".



Note

If you are using both devices 555Pro and Genius on the same PC, only after the first connection of 555Pro to PC you have to repeat the procedure of driver install for Genius.

7 BASIC TASKS

Once you got Genius the first operation you must accomplish is to leave it on charge 12h. this operation must be repeated once a month.

It is possibile to recharge Genius after each modification connecting it to the PSU 12volt.

This procedure is necessary to charge completely the internal battery (8.4volt da 600 mah), this battery is necessary for the data recovery after the loss of communication with the ECU.



GENIUS HANDBOOK

8 MAIN MENU

The first screen will show us:

a) main menu

b) information bar with voltage, date and time

Main menu has four buttons WORK, TOOLS, INFO, STANDBY that leed to the most important sections of work and information:

- WORK to work
- TOOLS to visualise files, Genius settings and test
- INFO to get information about Geius and its protocols
- STANDBY to set Genius in standby mode

To get details about each single process please see the related chapters.



WORK

WORK button gives acces to main work session, through a second level menu Genius allows to manage the **ID**entification (Chpt. 9.1 Pg. 11), **READING** (Chpt. 9.2 Pg. 13) and **WRITING** (Chpt. 9.3 Pg. 14).

TOOLS

TOOLS button gives access to the functions of visualisation of files loaded on the memory SD through the EXPLORE SD (Chpt. 10.2 Pg. 20). It is also possible to modulate the settings of display, language, date and time of Genius thanks to SETUP menu (Chpt. 10.1 Pg. 18); and run functional TEST (Chpt. 10.3 Pg. 21) on differents components like Ram, Display, Led and Battery.

INFO

INFO function gives all the information about Genius, Protocols and Features. (Chpt. 11 Pg. 21).

STANDBY

Once selected STANDBY button Genius goes into sleeping mode. To wake up Genius touch display once (Chpt. 12 Pg. 23).



9 WORK MENU

This menu gives access to main work session through some second-level menu that will lead to the processes of **ID**entification, **READING** and **WRITING**.

9.1 ECU ID

This operation allows the identification of the electronic unit, after that it will be possibile get the information necessary to download the correct setting file. To perform the IDdentification is possibile to follow two different ways that have the same result:

A)

1. Follow the path and choose the correct selection

Work→Vehicles→Manufacturer/Model/Type→Protocol

DIME RONIT [®]		Manufacturer	
WORK Work Veh	icles	FORD HYUNDAI JEEP KIA	AAIA
INFO STANDBY	tocols	LAND ROUER MERCEDES	[4][4]
Model	Ттре		
LANCIA K LYBRA MUSA	YANGIA 1.3 L 160 MU		
THESIS YPSILON			
		• ×	

2. Now the opening of the protocol will permit the IDentfication of the ECU.





3. After the selection of ID Genius will ask to switch on and off the dash-board and ECU information will be displayed, it is possibile to save all the information of the ECU.



To get once again the information of the Identification just finished it is necessary open the file saved inside the ID folder following Tools \rightarrow Explore SD \rightarrow ID folder. See Chpt.10.2 Pg. 20

After this operation we know the ECU identification data and it is possibile to search for the correct setting file inside Race database

B)

Follow the path suggested and select the correct protocol to use:

Work→Protocols





9.2 Serial reading

To get access to the Serial Reading it is necessary to follow the path below and choose the correct selection depending on the vehicle Work->Vehicle->Manufacturer/Model/Type->Protocol Otherwise follow the path Work->Protocols but you must know which protocol is required NOTE

Each time Genius reads the ECU it creates a file with <u>HEADER.</u> For details see Chpt.9.3 Pg.15.

At the end of the reading it is necessary to load the read file into the PC. For this operation follow the instructions at Chpt 13.2.1 Pg.26.

Once the protocol is opened it will be possibile to select Reading

1. Click on Raeding

Protocols
ID
 READING
WRITING
• • • i ×

2. After the visualisation of ID Genius will ask to switch on and off the dash-board (this procedure is required to verify the data). The reading progress bar will be displayed. After the reading we will have the file that is inside the ECU of the vehicle.





9.3 Serial Writing

After the modification it will be possibile to load the modified file inside the ECU of the vehicle.

To get access to the Serial Writing process it is necessary to follow the path and choose the correct selection depending on the vehicle $Work \rightarrow Vehicle \rightarrow Manufacturer/Model/Type \rightarrow Protocol$ Otherwise following the path $Work \rightarrow Protocols$ but you must know which protocol is required.

Once the protocol is opened it will be possibile to select Writing

G	rotocols
	ID
	READING
	WRITING
(• • • i ×

1. After selecting **Writing** Genius will show the folder Write with all the file modified or original that have been written or will be written inside ECU.

Then select the file to write and follow the procedure.



After selecting the file to write follow the procedure, in some cases Genius will ask to switch on and off the dash-board, it depends on the vehice.





2. Once started the procedure ECU identification numbers will be read again.

If the data displayed don't match with the hardware or software numbers click cancel and repeat the procedure chosing the correct file.

If the data match proceed clicking on " OK ".



N.B.

Each time Genius reads an ECU it creates a file with <u>HEADER</u>, it is a file caracterised by all the identification data (Manufacturer/Model/Type, date and time, protocol used etc.etc). this kind of code is recognised by Race EVO also during the creation of the modified file. With this type of code Genius won't have any doubt before the writing of the file.

If a file without <u>HEADER</u> is going to be written inside the ECU Genius will ask (to protect the ECU) if the file chosen is the correct one.

For more details on how extract the <u>HEADER</u> from the file see Chpt.13.2.1 Pg.28.



If the programming is confirmed it is possibile to control the programming procedure.

PROGRESS	
Programming ECU	

During this procedure do not perform any action on the vehicle or on Genius!!!

3. After programmig a message window will confirm the end of the procedure. Switch off the dash-board and click on OK.



NOW THE ECU PROGRAMMING IS TERMINATED!



9.4 Diagnosis

In **some serial protocols** it is available the deleting errors function. After serial programming in some ECU <u>might happen</u> (<u>it might not happen</u>) that some check lights in the dash-board light on.

For this reason **only on some serial protocols**, like for example on the FLASH_0082 for ECU VAG ME7.1.1, the deleting error function has been introduced.

1 – open protocol FLASH that has the deleting error procedure in this way

Work→Vehicles→select the correct vehicle otherwise

Work \rightarrow Protocols \rightarrow select the protocol FLASH with the deleting error procedure

Select the button DIAGNOSIS and run the deleting procedure clicking on the button DEL ERRORS



After it will be necessary to follow the procedure required by Genius, switch on the dash-board, a window with the processing bar will open then at the end of the procedure of errors deleting a message will ask to switch off the dash-board.

9.5 Index

Once inside the Protocols window at the bottom there is the tool bar with two buttons "Information" and the "Screwdriver".

Protocols	
ID	
READING	a constant of the state of the
WRITING	
	and a second



Information



This button allow the visualisation of all the information about the selected protocol, it shows the kind of line used by the protocol to communicate with the ECU.



Screwdriver



This button open the Setup K-line window about the selected serial Protocol, it gives the opportunity to modulate the transmission on the K-line.

<u>NOTE</u>

To manage these options it is strictly recommended the help of the technical support.

Setup	K-lin	е	
Pull	Up		
Speed	1		
		C	×

PULL UP

Selecting the "Screwdriver" and after the option **Pull Up** it is possibile to set the resistance of the serial protocol. It is possibile check the resistance enabled on Genius, and verify the ch'ange, on status bar (Es.Flash53).

FLASHL0053 PORSCHE BOSCH ME7.8	Sellip K-line Pull Up	FLASH_0053 PORSCHE BOSCH ME7.8
rotocols	Speed	Protocols
ID	^	ID
READING		READING
WRITING	Pull Up 1K1 Ohm	WRITING
🗕 📼 i 🗙	550 Ohm	
	367 Ohm	
	225 Ohm	
	Default	



GENIUS HANDBOOK

SPEED

Selecting the "Screwdriver" and after **Speed** it is possibile to modify the communication speed of the serial protocol. It is possibile check the resistance enabled on Genius, and verify the ch'ange, on status bar (Es.Flash53).



10 TOOLS MENU

10.1 Setup

Menu Setup manage the Genius settings, it allows the setting of the screen, language, date and time.

Setup	
Display	
Language	
Date	
Time	
	×

Display

In this section it is possible to calibrate and modify the settings of the Genius display:





Touch Panel: it enables the calibrating of the Touch Panel. The procedure ask to touch with the pen the four corners, suggested by the square, of the Touch Screen.



Brightness: it allows to choose the display brightness timing before it goes in standby.

30 seconds	
10 minutes	
1 hour	
fixed	

<u>Contrast</u>: it allows to increase or decrease the screen contrast.

Contrast	
→ ×	
	1100

Language

In the section Language it is possible to select the language for the Genius.

ENG.csv		
ITA.csv		
		-
		44



GENIUS HANDBOOK

Date and Time

In the section Date and Time it is possibile to modify day, month, year and date of Genius.





10.2 Explore SD

Explore SD allows to check what files are stored inside the SecurDigital, they are inside the three different folders of the main functions of Genius.



- Folder Read has all the Reading files saved
- Folder Write has all the files loaded that have to be written in the ECU

N.B.

Once inside one of these three folders it is possibile to check all the information of a single file. In this way it is possible to verify the HEADER of the files created, checking if the file we are going to use is correct.





10.3 Test

Test Menu allows to test different components of Genius in order to verify their status and functionality With this tool it is possible to verify Ram, Display, Led and Internal Battery of Genius.

E	lools		
	Esplora	SD	
	Setup		
	Test		
			×

Ram Test
Display Test
Led Test
Battery Test

In Tools→Test menu two different kinds of Ram test are available, Ram Test2 is a more detailed and deep analysis to run only after the request of the technical suport.

tam Te	est	
Test	Ram1	
Test	Ram2	
		×

Following the instructions of the Ram test of Genius it is possibile to check the execution and final result, after the Test Genius will ask to reset the system.

Ram Test	Ram Test
→ ×	
[Ram Test]	(Ram Test
Ram works correctly	The system will be reset

11 INFO MENU

Through this Menu it is possibile to verify the presence and functionality of Protocols, identity data and features of Genius.

Protocols	
Genius Info	
Features	



11.1 Protocols

Protocols section allows to check each single Serial Protocol, after selecting a Protocol and following the instructions it will be possibile to read all the data of the selected protocol.



In the Protocol list, left side, it is shown the protocol status:



11.2 Info Genius

This function visualise all hardware and software informations of Genius.





11.3 Features

Selecting Features we will be able to check the Features Options enabled, how many Serial Points for programming are still inside and what contract is enabled on Genius.



12 STANDBY

Selecting STANDBY it enables the sleeping modality. To wake up Genius just touch the screen.





13 PC CONNECTION

13.1 Hardware connection

To connect Genius to PC read the following instructions:

1 – Tthe power supply must be correctly set on the 12V



The connector must be set with the poles +/- as required for Genius.





2 - Connect the power supply to Genius and to the electric current.



3 - Connect USB cable to Genius.



4 - Connect USB cable to PC.



13.2 Software connection

After the connections to power and USB it is possibile to start the software communication between Genius and Race EVO. In order to run correctly this operation <u>Genius must be set in main menu</u>. After the connection with Race EVO Genus will show the message of USB comunication.

Eile View Emulator Tools Genius Update Help				
Update Eile for technical support File ID Explore	• :HK	USB	Comm:	ON

EXPLORE

To explore SD memory and work directly from Race EVO with the files read out by Genius click on Genius→Explore. SD memory directory and a work toolbar will open to allow the customer to work and manage the files stored inside Genius.

ADVISE:

It is suggested to work only with the files coming from an IDentification, a Reading or a Writing saved inside the folder File.

Enter inside the others folders only if requested by the technical staff.

Eile View <u>G</u> enius <u>H</u> elp	
: 🎓 🍽 🕘 🥥 🚭 🄃 🛷 🚳 : 7F Ϋ	р ÷÷ (х) снк
: Bile 🦂 🧔 🚍 🖶 : 1	🎎 🐄 🛨 — N. 🐲 🖹 🖄 🖻
: 🎓 Genius://	
Name	Attributes
G File	Directory
Cog	Directory
🗁 System 📐	Directory
🗁 Update 🥬	Directory



13.2.1 Join/Export file

To export files of ECU inside Race EVO and manage the modifications it is necessary to know the identification numbers of the ECU and download the correct setting file.

Once inside Race EVO open the corresponding setting file, it is possible to import the file read out with Genius with the button **Genius**, this button allows to **Import image from Genius**.



Select the file from the folder Read of Genius and save it inside the corresponding setting file selecting if it is an original or and already modified file.

	Eprom image description	n 🔀
Join Image	Description Banco61	
Select file type ③ Original		Cancel
O Modify	Chassis	
	Notes	
		~
	L,	3

6	200 500A R.1		LI IP A MAY ON	-			
Select I	prom image						
Selected car	LANCIA YPSI	LON 1.3 L 16	/ MULTIJET ECU:1064Y152	2			
Des	cription	Туре	Data	Checksum	CHK16I	Dimension	Number plate
LANCA50D.	ORI	0	12/04/2006 14:58:55	A50D	BFC4	3.53 Mbit	1
(P) (S) (G) E	lanco61	0	27/11/2006 18:16:32	5367	74E3	512 Kbit	
	400		12/04/2006 14:58:57	A6C6	D667	3 53 Mbit	

Now it is possibile to load the file read from the vehicle and manage the modifications required. For more informations about how to modify a file follow the instructions af Race Manual.



After modifications and saving of the file it is necessary to export the file on Genius, then select the desired file to export and click on the button **Genius**.

i Update	e <u>H</u> elp 5 7F 学辞 ← 100 0-86			
≥ 3	: 7F 学家 (1 00)のK			
य शाम ोर				
	20 m 12 m	- N. 🌫 🛛	S (P)	
13L16V	/ MULTIJET ECU:1064Y152	N		
Туре	Data	Checksum	CHK16I	Dimension
0	12/04/2066 14 58 55	ASOD	BFC4	3.53 Mbit
0	27/11/2006 18:16:32	5387	74E3	512 Kbit
	12/04/2006 14:58:57	A6C6	D667	3:53 Mbit
M	27/11/2008 18:21:20	\$367	7463	512 Kbit
	13L16) Type 0 0 0	1.3 L 16V MULTIJET ECU-1064Y152 Type Data 12/04/2006 14 58 55 27/11/2006 18 16 32 12/04/2006 18:57 27/11/2006 18:21:20	Type Data Check sum 1/3 L 16V MULTIJET ECU/1064Y152 Type Data Check sum 1/2/04/2006 14 58 55 AS0D 1/2/04/2006 14 58 55 AS0D 1/2/04/2006 14 58 55 AS0D 1/2/04/2006 14 58 57 A606 1/2/04/2006 14 58 57 A606 1/2/04/2006 18 21 821 5367	T 3 L 16V MULTIJET ECU/1064Y152 Type Data Checksum CHK161 0 12/04/2006 14:58:55 A90D BFC4 0 27/11/2006 18:16:32 5387 74E3 1 12/04/2006 14:58:57 A6C6 D667 1 27/11/2008 18:21:20 5367 74E3

From the Genius button select **Write image to Genius**, be sure that the file **.MOD** is saved with name inside the folder "Write".

120	Now File for EPROM	Find to:	DELL ALLAS		_/		7
	INEW FILE TOLEFFICIAL	r ma to.	Inclusion		/		_
	Restore from Emulator	Name		Attri	Dimension	Modify date	
	Serial Writing	<u>A</u>	MOD	File	128 KB	19/02/2007 12.23	
		A	MOD	File	512 KB	23/01/2007 11.56	
	Serial Reading	A	MOD	File	256 KB	01/12/2006 12.27	
2		<u>A</u>	ORI	File	1 MB	24/10/2006 19.20	
		<u>A</u>	ORI	File	256 KB	01/12/2006 15.40	
	<u>G</u> enius	A	MOD	File	1 MB	18/10/2006 17.10	
	(1) the burner by Cashie	A	ORI	File	1 MB	10/10/2006 19.56	
	write image to Genius	A	MOD	File	768 KB	12/09/2006 19.16	
	Import image from Genius	<u>A</u>	ORI	File	64 KB	06/10/2006 16.37	
		A	MOD	File	1 MB	12/12/2006 16.58	
		•					2
	KBack OK	1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 - 1000 -	L				
	KDOCK OK	File name:	MOE	2		✓ Sav	1

In order to be sure that the selected file has been correctly saved o Genius open the connection through the function Explore, open the folder File and check if inside the folder "Write" there is the file .MOD just imported.

Eile View Emulator Tools	Genius Update Help
	Update IHK
i Blue 💌 🗶	Eile for technical support Image: Construction of the support File ID
ų.	Explore

Now exit from the software connection with the PC and unplug all the hardware connections. Enter in the vehicle with Genius and follow the instructions for the Serial Writing Chpt. 9.3 Pg. 13



It is possible to export or import file from Genius following another way that allows to work with files also outside Race EVO.

To **<u>export</u>** ECU files inside Race EVO it is necessary a double click on Explore and click on File folder, there are present the files saved inside ID,Read, Write folders.



Once inside Read folder we will have the possibility to choose which file export.

Follow the procedure:

- o select the chosen file
- o click on the button Save file on the Toolbar
- o save the file, default folder is Upload
- choose to extract or not HEADER (YES / NO)



DON'T EXTRACT: the file of the vehicle with HEADER will be saved inside the folder. Following this procedure during the writing of the modified file inside ECU the Genius will know that the chosen file is correct for the ECU because the Genius will read the HEADER.

EXTRACT: the file of the vehicle without HEADER will be saved inside the folder and it can be exported out of the Race. Inside the folder will be saved also the HEADER in *.txt with inside all the instructions about the file read. Following this procedure during the writing of the modified file inside ECU the Genius will ask to confirm if the file that we are writing is correct because inside the file Genius won't find the HEADER.

Now it is possibile to manage the file read out with Genius inside or outside Race EVO.



13.2.2 File for the Technical Support

The customer has to export the file for the technical Support from Genius in two different cases:

- 1) correct ECU setting file missing in databank
- 2) technical support requires the sending of Log files

1) DS File

modifications.

If after the reading of the file the related setting file is not present in the Dimsport databank the file cannot be loaded and opened in Race, but the DS file can be sent to the Technical Support. This DS file will let the Technical Support to create a specific setting file for that ECU; after the downloading of the specific setting file inside Race EVO the customer will be able to proceed with

- Follow the procedure: - click on file for Support→ File DS
- select the correct file to send





2) Log file

Send these kind of files only after the request of the Technical Support, they need them to help the customer during particolar or problematic situation.

Follow the procedure:

- click on file for Support → File Log
- select the files required for the Techncal Support

Eile Yiew Emulator Tools	Genius Update Help	
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Update	► HK
i Bue 🖌 🏒 🧟	Eile for technical support	Save Log file
	File ID	File DS
	Explore	12

13.2.3 Update

Update function allow to run several updates for the Genius tool.

- Protocols Features
- System Version
- GOS Recovery

Eile View Emulator Tools	<u>G</u> enius <u>U</u> pdate <u>H</u> elp				
	Update N	•	Load ABL		
Elue 👻 🕹	Eile for technical support k File ID Explore	•	System	¥	1

Protocols features

Clicking on **Load ABL** it is possibile to import the ABL file with the protocols features that the customer has to enable on Genius.

System Version

After the connection of the PC to Internet the Update System function allows the updating of the Genius Operative System. It is suggested to periodically run the Automatic update of the GOS version in order to have always the last release available.

Eile ⊻iew Emulator <u>T</u> ools	Genius Update Help			
	Update	•	Load ABL	
Blue 🖌	Eile for technical support File ID	•	<u>}System</u> ▶	<u>A</u> utomatic <u>F</u> orced
	Explore			GOS recovery

Selecting **Automatic** Race EVO will verify and compare the versions of all the files of the GOS loaded on Genius with the last versions available. If there are some updates available they will be downloaded and automatically installed on Genius.

Selecting **Forced** Race EVO will run the download of the last release of GOS available and will perform the installation without comparing.



GOS Recovery

The function of GOS Recovery must be done only after the request of the Technical Support.

It is necessary to run the GOS Restoring after an interruption of data transfer during the Updating of the GOS and Genius lose all the necessary information to run correctly the system. Please contact the Technical Support if this problem happens.

13.2.4 File ID

Clicking on the button File ID is possible to visualise all the Identifications done and saved on Genius. This option allows to see on the screen all the info of the file in order to find out on the databank the corresponding setting file.



Name	Attr	Dimension	Modify date	-
<u> </u>	Fil	201 B	19/02/2007 11.52	
A	Fil	189 B	26/01/2007 15.17	
A	Fil	203 B	11/01/2007 12.29	
A	Fil	204 B	18/10/2006 17.07	
A	Eil	179 B	10/10/2006 16.30	
A	Fil	222 B	12/12/2006 15.48	
A.]	Fil	232 B	12/02/2007 18.21	
A	Fil	241 B	20/10/2006 11.54	
A)	Fil	228 B	11/12/2006 14.58	
A).	Fil	182 B	10/10/2006 15 13	-

Type file	D.
Protocol name	FLASH_0055
Protocol version	1.000
File date	11,01/2007
File time	12:28.44
Manufacturer	RENAULT
Model	CLIQ 3
Туре	1.5 L dCi 65HP
Protocol	FLASH_0055 RENANSS DELPHI 1.5 DDC
Hardware number	
Software number	



13.2.5 Genius Info and protocols

Under the "Help" of Race main menu there is Genius Setting option, clicking on this option with the Genius connected to the USB port of PC and to Power Pack it is possible to check all the features enabled on Genius.



This option allows to check all the features and contracts enabled on Genius. Bottom left there is one of the most important data it is always required by the Technical Support: GOS Version (Genius Operative System).

acts enabled on G	ENIUS.
	Expiration date
FREE	31/12/2007
FREE	31/12/2007
FREE	31/12/2007
	rRII

Serial Protocols Information button allows to check out all the serial protocols enabled.





List of enabled serial protocols classified by car and protocol:

protocols written in <u>normal</u> are enabled on Race, those written in <u>bold</u> are enabled on Genius. With the button **Features** it is possible to verify the serials contract.

Serial Prot List of avai	ocols able serial protocols. Protoco	ls on	gray	/ ar	e not available	ə.,		Serial Prot List of avai	ocols lable serial protocols. Protoco	ols o	n gr	ay are	not available	95	
Code	Description	A	CH	N	T Genius	Race	-	Code	Description	A	С	MT	Genius	Race	
FLASH_0001	FLASH_0001 FIAT BOS	1				4		FLASH_0001	FLASH_0001 FIAT BOS	1				FREE	
FLASH_0002	FLASH_0002 BMW SIE	1		1	1	1		FLASH_0002	FLASH_0002 BMW SIE	1			FREE	FREE	
FLASH_0003	FLASH_0003 BMW SIE	1			1	4		FLASH_0003	FLASH_0003 BMW SIE	1			FREE	FREE	
FLASH_0004	FLASH_0004 BMW SIE	1			1	1		FLASH_0004	FLASH_0004 BMW SIE	1			FREE	FREE	
FLASH_0005	FLASH_0005 BMW BO	1			1	4	_	FLASH_0005	FLASH_0005 BMW BO	1			FREE	FREE	
FLASH_0009	FLASH_0009 MINI SIE	1		1	1	4		FLASH_0009	FLASH_0009 MINI SIE	4	1		FREE	FREE	
FLASH_0010	FLASH_0010 ROVER B	1		1	1	1		FLASH_0010	FLASH_0010 ROVER B	1			FREE	FREE	
FLASH_0011	FLASH_0011 MERCEDE		1	,	/	1		FLASH_0011	FLASH_0011 MERCEDE		1	1		FREE	
FLASH_0012	FLASH_0012 MERCED	1	1	1	1	4		FLASH_0012	FLASH_0012 MERCED	4	4		FREE	FREE	
FLASH_0013	FLASH_0013 RENAUL	1	1		1	1		FLASH_0013	FLASH_0013 RENAUL	1	1		FREE	FREE	
FLASH_0014	FLASH_0014 HYUNDAI	1	1		1	4		FLASH_0014	FLASH_0014 HYUNDAI	1	1		FREE	FREE	
FLASH_0015	FLASH_0015 VAG TDI	1	1	1	1	1		FLASH_0015	FLASH_0015 VAG TDI	1	4		FREE	FREE	
FLASH_0016	FLASH_0016 VAG TDI	1	1		1	1		FLASH_0016	FLASH_0016 VAG TDI	1	1		FREE	FREE	
FLASH_0017	FLASH_0017 VAG TDI	1		1	1	4		FLASH_0017	FLASH_0017 VAG TDI	1			FREE	FREE	
FLASH_0018	FLASH_0018 FIAT BO	1		1	1	1		FLASH_0018	FLASH_0018 FIAT BO	1	1		FREE	FREE	
FLASH_0019	FLASH_0019 CHRYSL	1		1	1	1		FLASH_0019	FLASH_0019 CHRYSL	1			FREE	FREE	
FLASH_0020	FLASH_0020 NISSAN	1	1	1	1	4		FLASH_0020	FLASH_0020 NISSAN	4	4		FREE	FREE	
FLASH_0021	FLASH_0021 FIAT BO	1			1	4		FLASH_0021	FLASH_0021 FIAT BO	1			FREE	FREE	
FLASH_0022	FLASH_0022 FIAT BO	1	1		1	4	-	FLASH_0022	FLASH_0022 FIAT BO	1	1		FREE	FREE	

Once selected the Serial Protocol with the button Information u can see all the information about the selected protocol for Genius and Race: protocol version – enabled for – communication line

rotocol Information		2
Protocol code FLASH_0014 FLASH_0014 HYUNDAI CROI BOSCH EDE15C7		Chiudi
Genius information Version 3.007	SerExt information Version 2.004	



GENIUS HANDBOOK

14 AVAILABLE PROTOCOLS

T:TOTAL - P:PARTIAL - /: NOT POSSIBLE

	Description	PEAD	WPIT	Kline	CAN	11855	Wires
FLASH 0001	FIAT BOSCH ME 1.5.5 FAI		Т	X	CAN	31033	8
FLASH 0002	BMW SIEMENS MS41	P	P	X			5
FLASH_0003	BMW SIEMENS MS42	P	P	х			5
FLASH_0004	BMW SIEMENS MS43	P	P	X			5
FLASH_0005	BMW BOSCH DDE4 0	P	P	X			5
FLASH_0009	MINI SIEMENS EMS2	P	P	x			1
FLASH_0010	ROVER BOSCH DDE4 0	P	P	х			1
FLASH 0012	MERCEDES BOSCH EDC 15C6	Т	Т	X			6
FLASH_0013	RENAULT DCLBOSCH EDC 15C2	т	T	X			1
FLASH 0014	HYUNDAI/KIA CRDI BOSCH EDC 15C7	т	T	x			1
FLASH_0015	VAG TDI BOSCH EDC15VM+19	т	T	х			2
FLASH_0016	VAG TDI BOSCH EDC15VM+25	т	T	X			2
FLASH_0017	VAG TDI BOSCH EDC15P+	т	T	X			2
FLASH 0018	EIAT BOSCH ME73H4/21/31/731 EAI	т	Т	X			9
FLASH 0019	CHRYSLER/JEEP CRD BOSCH EDC15C2	т	т	x			1
FLASH 0020	NISSAN TODI BOSCH EDC15C2	т	т	X			1
FLASH 0021		т Т	т	X			7
FLASH 0022		т Т	, т	X			1
FLASH 0023	MERCEDES BOSCH CDI EDC15C5 EURO2	т Т	, т	X			6
FLASH 0024	MCC SMART BOSCH EDC15C5	т Т	, т	X			1
FLASH 0025	MCC SMART BOSCH MEG1 0/1 1	1	т Т	X			1
FLASH 0026		/	т Т	X			1
FLASH 0027	BMW 320D DDE3 0 126CV	/ D	I D	x			1
FLASH 0028	MAG MEZ X 4Mbit	Г	г Т	x			1
FLASH_0020		і т	 	X			1
FLASH_0029		і т	 	X			2
FLASH_0030		। - न	- I - T	X			2
FLASH_0031				X			1
FLASH_0034		г т		X			1
			P	X			1
FLASH_0035		Р т	Р 	X			1
FLASH_0041		1	 	X			1
FLASH_0041		/	<u> </u>	X			1
	LAND ROVER TD3 MEMS NNN PSOP 29F200BT	Р т	Р 	X			1
FLASH_0040		і т	 	X			1
FLASH_0049	HONDA 1.7 CDTT BOSCH EDC 15C7			X			1
FLASH_0050		Р т	Р 	X			1
FLASH_0052				X			1
FLASH_0054		P	P	X X			1
FLASH_0054		P	P	× ×			1
FLASH_0055		P T	Р 	× ×			1
				X	Y		1
		P	P	×	^		1
	PIAT/LANCIA MAKELLI MJT 1300	P	P	×			1
FLASH_0062		Р	Р	× v	v		1
FLASH_0064		P	P	A V	^		1
FLASH_0067	SUZUKI-OPEL MAGNETI MARELLI MJT 1300	Р 	Р 	×	Y		1
FLASH_0068	VAG BUSCH EDC16 U/2.1	1		×	^		1
FLASH_0070	PSA BOSCH EDC16 C0/C3	Р	Р	X			1



GENIUS HANDBOOK

ID GENIUS	Description	READ	WRIT	K Line	CAN	J1855	Wires
FLASH 0071*	RENAULT BOSCH EDC16 C0/C3	Р	Р	Х			1
	VAG EDC16+ U31/U34	Р	Р	Х	X		1
FLASH_0073	VAG EDC16+ CP34	Р	Р	Х	Х		1
FLASH_0074	MEB BOSCH EDC16	Т	Т	Х			1
FLASH_0075	PSA BOSCH EDC16+ CP34	Р	Р	Х	Х		1
FLASH_0076	FAL BOSCH EDC16+	Р	Р	Х	X		4
FLASH_0077	KIA/HYUNDAI BOSCH EDC16+	Р	Р	Х			1
FLASH_0078	CHRYSLER BOSCH EDC16	Т	Т	Х			1
FLASH_0080	PORSCHE BOSCH M5.2.2	Р	Р	Х			3
FLASH_0081	MERCEDES BOSCH EDC16+ CP32	Р	Р		Х		1
FLASH_0082	VAG ME7.1.1 CAN	Т	Т		X		1
FLASH_0084	RENAULT SAGEM 3000	Р	Р	Х	X		1
FLASH_0086	SUZUKI BOSCH EDC16 C0/C3	Р	Р	х			1
FLASH_0087	VAG BOSCH ME9.5 FSI	Т	Т		Х		1
FLASH_0088	CHRYSLER BOSCH EDC16+	Р	Р		Х		1
FLASH_0089	MERCEDES 3.0 CDI BOSCH EDC16+ CP31	Р	Р	х	X		1
FLASH_0090*	OPEL BOSCH EDC16C39	/	Т		Х		1
FLASH_0091	VAG BOSCH ME9.1TFSI	Т	Т		Х		1
FLASH_0093	VOLVO BOSCH EDC16+ C31-6	Р	Р	Х			4
FLASH_0094	LAND ROVER SIEMENS SID 201/204	/	Р		Х		1
FLASH_0095	FAL MARELLI MJD6F3 MPC563	Т	Т	Х			1
FLASH_0095F	FAL MARELLI MJD6F3 MPC563	/	Т		X		1
FLASH_0097	FORD BOSCH EDC16+ C34	Р	Р		Х		1
FLASH_0100	RENAULT SIEMENS SID 301	Р	Р		X		1
FLASH_0104	OPEL MARELLI+6O203D	Т	Т	Х			1
FLASH_0105	RENAULT BOSCH EDC16+C36	Р	Р	Х			1
FLASH_0106	PSA SIEMENS SID803/803A/201	/	т	Х	Х		1
FLASH 0107	VAG BOSCH ME9.1.1 FSI	т	т	Х	Х		1
 FLASH 0108	FAL MAGNETI MARELLI 4SF	Р	Р	Х			1
FLASH_0109	SSANGYONG DELPHI DCM	т	т	Х			1
FLASH 0111	PSA BOSCH ME 7.4.5	P**	P	Х	Х		1
FLASH 0112	SUZUKI DELPHI DCM1.2	Р	Р	Х			1
FLASH 0113	OPEL MERIVA DTI DELPHI	Т	Т	Х			1
FLASH 0120	MERCEDES SIEMENS 5WK9 SIM4LE	Р	Р	Х			1
FLASH 0122	REANAULT MARELLI 5NR	т	т	Х			1
FLASH 0123	VAG SIEMENS PPD1.XX	P	Р	Х	X		1
FLASH 0124	SSANGYONG DELPHI DCM3.2	т	т	Х			1
FLASH 0126	CHEVROLET BOSCH EDC16+ C39	P	P		Х		1
FLASH 0127	OPEL BOSCH EDC16+ C39	P	P	Х	Х		1
FLASH 0129	FAL BOSCH MEZ 9 10		т	Х	Х		1
FLASH 0130	SAAB BOSCH EDC16+ C39	P	P	Х	Х		1
FLASH_0132	PORSCHE BOSCH MET 8 MY>06/2004	/	т	х			1
FLASH 0133	MCCSMART/MITSUBISHICOLT BOSCH EDC16+C31	P	P	х	Х		1
FLASH 0134	MCCSMART FORTWO BOSCH EDC16+ CP32	/	т		Х		1
FLASH 0135		P	P		X		1
		/ **	T	Х			1
		/**	T	X			1
	VAG BOSCH EDC16U/2 1 V/10 M8 S	, т	T	X			1
12401-0139	VAG BOSOTI EDG 100/2.1 V 10 MAS						



	Description	DEAD	WDIT	Kline	CAN	14.955	Miree
ID GENIUS	Description	READ	WRII	K Line	CAN	J1000	wires
FLASH_0140	VAG BOSCH EDC16+U31/U34 V10 M&S	Р	Р	X			1
FLASH_0141	HONDA BOSCH EDC16C1-7	Т	т	Х			1
FLASH_0144	NISSAN QASHQAI BOSCH EDC16+ CP33	Р	Р	Х			1
FLASH_0145	VAG BOSCH ME9.1.1 FSI V8/V10 M&S	т	Т		Х		1
FLASH_0149	MERCEDES SIEMENS SIM4LKE	Р	Р	Х			1
FLASH_0150	PSA BOSCH EDC16+ CP39	Р	Р		Х		1
FLASH_0151	RENAULT SIM32	Р	Р		Х		1
FLASH_0152	FORD BOSCH EDC16C3	Т	Т		Х		1
FLASH_0153	DODGE/JEEP/MITSUBISHI BOSCH EDC16+ U31	Т	Т		X		1
FLASH_0154	LAND ROVER FREELANDER BOSCH EDC16+ CP39	Р	Р		Х		1
FLASH_0155	FORD SIEMENS SID803A/SID202	Р	Р		Х		1
FLASH_0156	FORD SIEMENS SID206	Р	Р		Х		1
FLASH_0157	FORD SIEMENS SID803	Т	Т		X		1
FLASH_0158	FORD SIEMENS SID804	Т	Т		Х		1

* for a correct use of this protocol please check appendix "B"

** it could be necessary to read with Trasdata tool



15 WIRING LIST

Details of the wiring components are at Pag. 4-5-6-7-8 Chpt.3 **WIRING 1:**

1. CABLE OBD II K-CANBUS- J1850 (Rif.2)

WIRING 2:

- 1. CABLE OBD II K-CANBUS- J1850 (Rif.2) Connecting directly to the ECU: Cables 2008
- 1. CONNECTOR FOR ECU V.A.G (Rif.21)

Old cables

- 1. ADAPTOR FOR FLASH4 WIRING SYSTEM (Rif.4)
- 2. CONNECTOR FOR ECU V.A.G (Rif.13)
- 3. BATTERY CABLE (Rif.11)
- 4. PSU 12 volt (Rif.10)

WIRING 3:

Cables 2008

1. CABLE OBDII FOR PORSCHE M5.2.2 (Rif.20)

Old cables

- 1. ADAPTOR FOR FLASH4 WIRING SYSTEM (Rif.4)
- 2. CABLE OBDII FOR PORSCHE M5.2.2 (Rif.12)

WIRING 4:

- 1. CABLE OBD II K-CANBUS- J1850 (Rif.2)
- 1. UNIVERSAL WIRING FOR SERIAL PROGRAMMING (Rif.7)

Old cables

- 1. ADAPTOR FOR FLASH4 WIRING SYSTEM (Rif.4)
- 2. UNIVERSAL WIRING FOR SERIAL PROGRAMMING (old cable with K-line only)

WIRING 5:

- 1. CABLE OBD II K-CANBUS- J1850 (Rif.2)
- 1. ADAPTOR FOR FLASH4 WIRING SYSTEM (Rif.4)
- 2. PLUG CABLE RJ45 (Rif.14)
- 3. BMW DIAGNOSTIC CONNECTOR (Rif.14)

WIRING 6:

- 1. CABLE OBD II K-CANBUS- J1850 (Rif.2)
- Cables 2008
- 2. MERCEDES DIAGNOSTIC CONNECTOR CABLE (Rif.22)

Old cables

- 3. ADAPTOR FOR FLASH4 WIRING SYSTEM (Rif.4)
- 4. MERCEDES DIAGNOSTIC CONNECTOR (Rif.15)



WIRING 7:

- 1. CABLE OBD II K-CANBUS- J1850 (Rif.2)
- Cables 2008
- 1. FIAT ALFA LANCIA DIAGNOSTIC CONNECTOR FOR SERIAL COMMUNICATION (Rif.23)
- 2. RED WIRE +12V
- 3. BLACK WIRE GND

Old cables

- 1. ADAPTOR FOR FLASH4 WIRING SYSTEM (Rif.4)
- 2. FIAT ALFA LANCIA DIAGNOSTIC CONNECTOR FOR SERIAL COMMUNICATION (Rif.16)
- 3. RED WIRE +12V
- 4. BLACK WIRE GND

WIRING 8:

- 1. CABLE OBD II K-CANBUS- J1850 (Rif.2)
- 2. BLUE WIRE

Cables 2008

- 1. FIAT ALFA LANCIA DIAGNOSTIC CONNECTOR FOR SERIAL COMMUNICATION (Rif.23)
- 2. RED WIRE +12V
- 3. BLUE WIRE

Old cables

- 1. ADAPTOR FOR FLASH4 WIRING SYSTEM (Rif.4)
- 2. FIAT ALFA LANCIA DIAGNOSTIC CONNECTOR FOR SERIAL COMMUNICATION (Rif.16)
- 3. RED WIRE +12V
- 4. BLUE WIRE

WIRING 9:

Cables 2008

- 1. CABLES A FOR BOSCH ME7.3.1, ME3.1, ME2.1, ME7.3H4 HYBRID ECU (Rif.24)
- 2. CABLES B FOR BOSCH ME7.3.1, ME3.1, ME2.1, ME7.3H4 HYBRID ECU (Rif.25)
- 3. BATTERY CABLE (Rif.11)
- 4. PSU 12 volt (Rif.10)

Old cables

- 1. ADAPTOR FOR FLASH4 WIRING SYSTEM (Rif.4)
- 2. CABLES A FOR BOSCH ME7.3.1, ME3.1, ME2.1, ME7.3H4 HYBRID ECU (Rif.17)
- 3. CABLES B FOR BOSCH ME7.3.1, ME3.1, ME2.1, ME7.3H4 HYBRID ECU (Rif.18)
- 4. BATTERY CABLE (Rif.11)
- 5. PSU 12 volt (Rif.10)



WIRINGS COMPONENTS

WIRING 1:



WIRING 2:

This kind of ECU requires the OBDII connection, only in few cases there is no communication between OBDII and ECU.

If there is not any possibility to connect through OBDII socket because there is not any kind of communication with the ECU the only way to communicate is through CONNECTOR FOR ECU V.A.G. (Old cable Rif.13 or cable 2008 Rif.21)



CAUTION: if it will be necessary to remove the ECU you can use the following wiring:



GENIUS HANDBOOK

04th AUGUST 2008



CAUTION: After any Read/Write operation with this wiring it's necessary to make a diagnosis in order to delete eventual errors inside the ECU (Airbag light etc....)



WIRING 3:

Cables 2008



Old cables





WIRING 4:





<u>Cables 2008</u>

(ATTENTION for this wiring see Appendix A)



Old cables

(ATTENTION for this wiring see Appendix A)





WIRING 5:



Dimensione Sport s.r.l.







Cables 2008



Old cables



WIRING 7:





Cables 2008



Old cables





GENIUS HANDBOOK

WIRING 8:

This wiring is made up of connectors for serial Reading/Writing procedure and additional connectors that allow you to communicate with particular ECU. So we have two different type of wiring:

Wiring 8.1 (With OBDII connector)



CAUTION: We must put one endpoint of the blue wire in the OBDII blue connector, the other one must be connected to the Pin 10 of the ECU.

Or

Wiring 8.2 (With FIAT-ALFA-LANCIA connector)

Cables 2008





Old cables



CAUTION: one endpoint of the blue wire must be connected to FIAT/ALFA/LANCIA blue connector, the other one must be connected to the Pin 10 of the ECU, for what concern the red wire, one endpoint must be connected to the +12V battery connector and the other one to the FIAT/ALFA/LANCIA red connector

WIRING 9:

CAUTION: for this wiring it's necessary to remove the ECU, you can work using the following wiring (SINGLE or DOUBLE)

Wiring 9.1 (Single without blue wire) Cables 2008



Dimensione Sport s.r.l.



Old cables



Wiring 9.2 (Double with blue wire) Cables 2008





CAUTION: in order to select the right wiring (SINGLE or DOUBLE) please read the following indications:

Reprogramming through direct connection to the ECU :

The connection to the ECU is direct and it is obtained using the suitable cable, double or single connector, with the white adapter RJ45, the supply power is obtained directly through the battery or from the electrical network. Cables are divided into two main families:

SINGLE TYPE CABLE (WITHOUT BLUE WIRE): supplied with a crocodile-clipped black wire that must be connected to the ground pin of the ECU (aluminium box).

We consider "single type" all the ECU with both reading and writing pins on a single connector. In order to identify a single type we must find the numbers printed on the ECU. If the numbers are **253** and **254**, only the right connector MUST BE USED (Marked with RED lines).

Make sure that pins 15, 32, 48 are communicating between them by using a digital multimeter!





DOUBLE TYPE CONNECTOR (with external BLUE WIRE):

supplied with a crocodile-clipped black wire that must be connected to the ground pin of the ECU (aluminium box) and an additional female pin-ending BLUE wire that must be plugged to the LEFT connector located on the ECU (other available connector).

We consider "double type" all the ECU with serial reading and writing pins on both connectors. As for the single type connector, power supply pins and diagnosis pins are located on the right connector, whereas the pin which enables the communication is located on the left connector (marked in BLUE). The identification numbers for this kind of ECU are **314** and **313**.

For this kind of ECU, the double type connector must be plugged into the RIGHT CONNECTOR and the blue wire, which extends it self from the cable, must be connect to the **PIN 20** in the LEFT CONNECTOR.

CAUTION : For some ECU, as the ME7.3.1 the position of the original connector does not correspond to the position of the FLASH0018 cable. Do not force the FLASH0018 cable into the ECU connector if the position

isn't correct. On the contrary for ME3.1 and ME7.3H4 the position of the original connector and the position of the FLASH0018 cable correspond.

Make sure that pins 17, 33, 49 in the right connector are communicating between them by using a digital millimetre.



APPENDIX A (Special Applications)

FLASH_0076 (FAL BOSCH EDC16+)

A direct connection between OBDII socket and ECU is not possibile because there is no K-line. To solve this problem it is necessary to connect directly to the PIN 25 in the ECU. You have to lift up the connector then, by using the universal cable, you have to connect the K-line of the universal cable (yellow wire) with one end of the blue connection wire. Then link the second end of the same blue connection wire to PIN 25 of the ECU.



To create the connection we have chosen to connect the K-line (yellow wire of the universal cable) to PIN 43 using the blue wire, after we have connected with the clamps the red wire to the positive pole of the battery (+12V) and the black wire to ground (GND).





FLASH_0093 (VOLVO BOSCH EDC16+ C31-6)

In Volvo cars that have ECU Bosch EDC16+ C31-6 the communication between PIN 7 of OBD II and PIN 43 of ECU is missing.

It is necessary to connect Genius with the connectors of the ECU following the instructions:

1 - Unplug the little connector of the ECU and dismantle warily the plastic protection as in the pictures







2 – In the connector look for the **PIN 43** that allows the communication with the ECU. To create the communication we decided to connect the K-Line (yellow wire) of the universal wiring (Rif.7) to the PIN 43 using the blu wire as in the pictures below, then we have connected the red wire to the positive pole of the battery (+12V) and the black one to ground (GND) using little clamps.





APPENDIX B (Specific Procedures)

FLASH_0071 (RENAULT BOSCH EDC16 C0/C3)

FLASH_0071protocol for ECU Reanault Bosch EDC16 C0/C3 has been studied to solve the problem with the injectors codification.

To work properly and manage a correct modification on ECU Reanault Bosch EDC16 C0/C3 it is obbligatory to make the serial operations (reading and writing in ECU) with cold engine and it is necessary to follow the sugested procedure:

1 – after connecting Genius to OBDII socket the first operation to do is the reading of injectors code: open the protocol FLASH_0071 in this way

- Work→Vehicles→select the correct vehicle
- otherwise Work→ Protocols→ select the protocol FLASH 0071

Select the button CODING and continue with the READING of the code



2 – A window will show the Informations of the, continue with the reading. Then you will have to save the code file with name.

Information	Save Code
HW: 8200310863	
SW: 1037368735 Upg. SW: 8200370823	→ ×
Chassis: VF1BMRG06311	Q W E R T Y U I O P A 3 4 S O F G H J 5 6
Continue with the reading of the code?	$\begin{array}{c c} V & B & N & M & A & E \\ \hline C & T & O & O \\ \hline C & T & A & $

3 - after reading the injectors code it is possibile to read the whole file of ECU, export i tinto Race EVO and manage the modifications.



4 – After the modifications you have to export the mod file from Race EVO into Genius in order to write in the ECU. Follow the procedure for serial writing as described at pa. 13 Chp. 9.3 When you choose the correct .mod file to write a message will appear:



N.B.

It is necessary to read the injectors codes before writing procedure, If you do not have read out the injector codes you MUST do it right now aborting the procedure of writing and following the instructions at pg.39

If you have already read the injectors codes click on Continue.

5 – When the Writing procedure is started follow the messages of switching ON/OFF as required. Genius will automatically read the injectors codes setting it in RAM memory, then it will proceed with the writing of .mod file until a message will appear:

MESSAGE
A new codification of injectors will be performed now. Switch on the dash-board.

Select Continue and Genius will proceed with writing back the injectors codes file. At the end of writing will appear this message:





ATTENTION

If there are interruptions of communication during writing procedure, or something that blocks the correct automatic writing procedure of injectors codes and the car does not start it will be necessary a manual writing procedure of injectors codes. For this operation please read the following procedure:

1 – open protocol FLASH_0071 in this way Work→Vehicles→select the correct car otherwise Work→ Protocols→ select the protocol FLASH_0071 Select the button CODING and run the WRITING procedure of codes



Now select the correct injectors codes file saved before inside the folder COD, if you are not sure of what file choose please check the chassis number witten in the Information window. To proceed please click on Continue.

Information	
HW: 8270310863	
SW: 10 <mark>37368735</mark>	
Upg. 9W: 8200370823	
Chass s: VF1BMRG063119	
	-
Continue with the writing of the	
×	
	1

After the end of writing injectors codes procedure Genius will display this message.





FLASH_0090 (OPEL BOSCH EDC16C39)

FLASH_0090 protocol for ECU Opel Bosch EDC16C39 cannot read the file inside the ECU but it has been studied to run a verify between the file inside ECU and the original file present in the corresponding setting file.

It is necessary follow the procedure:

- 1 make Identification and with the ECU numbers search for the corresponding setting file in data bank.
- 2 download the correct setting file in Race EVO, then export the .ORI file on Genius
- 3 after connecting Genius to OBD II socket enter into the menu of the FLASH_0090 protocol in this way: Work→Manufacturer→Model→Type→ select the corect vehicle oppure

Work \rightarrow Protocols \rightarrow select the protocol FLASH_0090





ID	
WRITING	3
VERIFIC	CATION

4 - once entered in the menu protocol it is necessary to select the button Verification.
 In the next window you have to select the file .ORI that you saved before in the folder Write, click on the button Continue to run the Verification between the two files.





5 - now a sequence of messages will ask you to switch on and off the dash-board, follow the instructions and the requests clicking on the button Continue until it will join the end of the verification. If Verification is OK Genius will ask to execute the modification starting from the selected .ORI file.

MESSAGE Switch on the dash-board, check the connections and press OK to continue.	PROGRESS Wait: starting communication.
MESSAGE Switch off the dash-board to continue	MESSAGE Switch on the dash-board, check the connections and press OK to continue.
Information HW: 0281012122 SW: 1037371870 Chassis: W0LOAHL08552 Engine: Z19DTJ Continue to verify?	
MESSAGE Switch off the dash-board to	MESSAGE Switch on the dash-board, check the connections and press OK to continue.
Mait: starting communication.	MESSAGE File correctly verified. Start the modifications from this file.



APPENDIX C – VAG COUNTER RESET

VAG COUNTER RESET is an optional feature not included in any contract, in order to have it please contact directly the commercial department.

 $\mathsf{Select}\:\mathsf{TOOL}\to\mathsf{SPECIAL}\to\:\mathsf{COUNTER}$

FLASH_0068 VAG BOSCH EDC16U/2.1	FLASH_0068 VAG BOSCH EDC16U-2.1	FLASH_0068 UAG BOSCH EDC16U/2.1
Protocols	TOOL	SPECIALS
READING	SPECIALS	X
RECOVERY		
550 Ohm SPEED NAK	S50 Ohm SPEED MAX	550 Ohm SPEED MAX

READING

The first time you want to work with counters wuo will have to READ and WRITE a part of the FLASH and of the MICROPROCESSOR. At the end of the reading save this file in Genius. The reading mode starts only if the PATCH FILE is NOT found in the ECU.

FLASH_0168 COUNTERS BOSCH EDC160/2.1
Protocols
READING
WRITING
RECOVERY
i ×
550 Ohm SPEED MAX





If the PATCH FILE is already present in the ECU you can directly modify the counter by clicking on READING button.

MESSAGE It's not necessary to read ECU Counter modification enabled OK

Ø	OUNT	ER			
	Attempt	ed:	Súccee 008	ded	
	ОК	٦	[×	
-		annof"	Herentaliska katoromoto	rtennarinnen anna derennan	-

FIRST WRITING

In order to modify the counter the first time you have to program the ECU with the PATCH FILE. Select the file read, correct the value for succeded writings and press OK. ATTEMPTED counter will be automatically aligned with SUCCEDED.

FLASH_0168 COUNTERS BOSCH EDC16U/2.1	FLASH_0168 COUNTERS BOSCH EDC16U/2.1
File ///Special Golf.mpc	COUNTER Attempted: Succeeded: 006 008 () () ()
550 Ohm SPEED MAX	550 Ohm SPEED MAX



Via Torino, 16 - 15020 GABIANO (AL) - ITALIA

E-mail: support.race@dimsport.it http//www.dimsport.it

MANUAL VERSION 1.4 PRINTED ON 04th AUGUST 2008