#### MAGICMOTORSPORT F.A.Q.

#### 1. What is FLEX?

FLEX is a programmer for ECUs and TCUs that allows the user to recalibrate vehicles for competitive purposes as well as manage their electronic repair.

The tool has been specifically designed to communicate with all types of microprocessors as well as connect to control units in a multitude of programming modes: in OBD and Bench on a closed ECU as well as in Bootloader, BDM and JTAG.

Thanks to its versatile hardware, the FLEX software is fully customizable through the selection of SW packages. The user can either choose the full SW version that includes all supported protocols or specific SW packages that include only protocols from a specific family of microprocessors. The FLEX HW is the same for both the MASTER and SLAVE version of the tool.

#### 2. Where can I find the FLEX vehicle list?

You can consult the FLEX vehicle list at the following link: https://www.magicmotorsport.com/flex/vehicle-and-services-list/

## 3. How can I purchase FLEX?

You can purchase your FLEX tool through the MAGICMOTORSPORT online shop at https://www.magicmotorsport.com/shop/product/flex-configurator/
Or you can contact an Official MMS Distributor. Go to this link to find one near you, we are all over the world: https://www.magicmotorsport.com/contact-us/

## 4. What are the minimum PC requirements for using FLEX?

Processor: Quad Core 2.5 GHz

Ram: 4GB DDR3

Memory: SSD of any capacity

Operating System: Windows 7 Ultimate SP1, Windows 8, 8.1, 10

## 5. Which SW configuration can I choose for my FLEX?

Here is the list of software packages that are available to customize FLEX that can be activated in both MASTER and SLAVE versions:

FLS0.1 - Flex ECU OBD + Bench software

FLS0.2 - Flex TCU OBD + Bench software

FLS0.3 - Motorola MPC5xx Flex software

FLS0.4 - Flex Nexus MPC5xxx software

FLS0.5 - Full Flex SW Package

FLS0.6 - Flex Renesas SH7xxxx software

FLS0.7 - Siemens C165 / 166/167 Flex software

FLS0.8 - Flex software ST10F2xx

FLS0.9 - Flex software NEC 76F00xx

FLS0.10 - Infineon TC17xx software

# 6. I have already purchased a SW package for FLEX, can I still get the FULL package?

Sure! You can upgrade from any software package to the FULL SW version by bearing the necessary costs. Contact the MAGICMOTORSPORT Sales Dept for more information.

#### 7. What is the difference between a MASTER and SLAVE tool?

#### MASTER

The FLEX Master tool has no limitation of file formats. The Master user works with plaintext files and .bin formats that are both editable with any type of software. Furthermore, the Master has the possibility to use the file modification services offered by MAGICMOTORSPORT and have access to 300 free Green coins per month as well as benefit from full MMS Tech Support.

#### SLAVE

The FLEX SLAVE tool can only work with encrypted files and therefore the user does not have the ability to access the content and cannot edit them. Any types of modification required by the Slave user must be forwarded to their Master who can encrypt and decrypt their files.

The Slave tool must be linked to a Master one. This Master can either be chosen by the Slave user or be recommended by MAGICMOTORSPORT based on the general geographical area of the Slave user.

Once the Master has been chosen, the Slave user will be exclusively linked to that Master for any operation that requires the modification of files. The Slave user benefits from basic MMS Tech Support and all support requests must first be handled by their Master.

## 8. How do you manage a SLAVE network?

The Master user is required to purchase a Slave file decrypting module for his HelpDesk account through which they will be able to encrypt and decrypt the files submitted by their Slaves. It is possible to manage up to a max of 99 Slave users with one module. Once the limit has been exceeded, the Master must purchase a second module.

## 9. Is it possible to change MASTERS?

A Slave user can change their Master without incurring any fees. However, MAGICMOTORSPORT must receive written authorization from the current Master before proceeding to release the Slave.

The Master can send this communication via email at info@magicmotorsport.com or a Sales Dept. ticket in the HelpDesk and specify the serial number of the Slave tool to be released.

## 10. Can I upgrade from SLAVE to MASTER?

Yes, it is possible to upgrade from FLEX Slave to Master. The Slave user must pay an activation fee equal to the SW price difference between the Slave version and the Master version of the tool in his possession. Before proceeding with the upgrade, the Master must send authorization to release the Slave to MAGICMOTORSPORT.

This can be done by contacting MAGICMOTORSPORT via email at info@magicmotorsport.com or a Sales Dept. ticket or through a local Official MMS Distributor.

## 11. What are the product warranty terms?

FLEX tools with an active subscription are covered by a lifetime limited warranty. This warranty states that in the case of damage confirmed by Tech Support through a Repair Request Ticket to either the FLEX (FLX1.1) or FLEXBox (FLX1.9) module, the user may request a new interface without incurring any additional fees other than shipping. For more information go to this link:

https://www.magicmotorsport.com/documentation/warranty-terms/

#### 12. How do I activate my FLEX?

• Go to https://mms.magicmotorsport.com and register a Helpdesk account;

- Confirm your e-mail address through the message received at the email entered during registration;
- After accessing the Helpdesk, click on the "Account" tab at the top right, then on "Tools" and finally on "Activate new products".

Enter the serial numbers that have been provided on purchase of FLEX;

- Insert the serial number written on the back of the FLX1.1 FLEX tool, then click on "add";
- Insert the serial number written on the back of the FLX1.9 FLEXBox tool, then click on "add";
- Insert the serial numbers of the selected SW packages, either provided to you by your Official Distributor or shown on the MMS purchase invoice and click on "Activate new products";
- \* if you are a Slave user, by clicking on "Activate new products" a new field will appear in which it is necessary to insert either the FLEX S/N or Helpdesk email of the selected Master.
  - Now you can proceed with the installation of the FLEX software.

#### 13. How do I install the FLEX software?

Once you have registered your account on the MMS Helpdesk (see F.A.Q. art. 12), follow these steps:

- Log in to your HelpDesk account via this link: https://mms.magicmotorsport.com
- Click on "Account" at the top right of the screen
- · Click on "Tools"
- Click on the item "Upgrade"

Once the software has been downloaded, start the installation file and follow the steps below For more explanations these video tutorials are available:

- How to install FLEX: https://www.youtube.com/watch?v=LwFwuk1mPBg&t=1s
- How to install Drivers: https://www.youtube.com/watch?v=Py\_Xasfekhg&t=13s

#### 14. What is the FLEXBox and how does it work?

FLEXBox is the interface that communicates with FLEX through the programmer's I/O port. This interface facilitates connections in Bench, Bootloader, BDM and JTAG modes for work on ECUs and TCUs and is a simple and fast solution for bench connections. FLEXBox is equipped with CAN-BUS, K-line, L-iso and UART communication channels and receives power signals that allow a direct exchange of data between the FLEXBox (and therefore FLEX) and the ECU or the TCU.

#### 15. Connection methods

OBD: a connection mode for the programming the ECU and TCU directly from the vehicle's diagnostic socket. It is not necessary to open the control unit in this modality.

BENCH: a connection mode for ECU and TCU programming on the bench. It is not necessary to open the electronic unit in this mode.

BOOTLOADER: a connection mode for ECU and TCU programming on the bench. It is necessary to open the electronic unit to work in this mode.

## 16. I am not satisfied with my purchase, can I return FLEX?

MAGICMOTORSPORT offers a thirty (30) day money back guarantee on all its products. For more information read here

https://www.magicmotorsport.com/it/documentation/moneyback-guarantee/

## 17. I need assistance, how do I contact the MAGICMOTORSPORT team?

- By chat on our website: www.magicmotorsport.com
- By MMS Helpdesk Ticket: https://mms.magicmotorsport.com
- By email at: info@magicmotorsport.com
- By phone at +39 0917487722 or +39 0917487723

# 18. What is the MMS Helpdesk?

It is the online user interface system through which it is possible to use and access services, information, technical manuals, databases and files. This is a direct channel with the Customer Care service. See the list of services available at the following link https://www.magicmotorsport.com/documentation/helpdesk-services-list/

# 19. What is a ticket and why is it important?

A ticket is the most efficient way to request technical and commercial assistance. It is important to use the ticket system because it allows you to include all the details necessary for a rapid solution to the problem (for example it is possible to attach: .log file, screenshot, etc ...)

#### 20. How do I open a ticket?

Log in to the Helpdesk and access the Ticket> Create New> Tech Support section.

Fill out the form:

- 1. Title: specify the details of the vehicle, ECU or TCU to be programmed and briefly describe the reason for the request.
- 2. Attachment: add the compressed .log files (.rar or .zip) and, if possible, all the files related to the problem (read files, write files, photos, etc.).
- 3. Description: include a detailed description of the reason for the request, indicating the work pocesses carried out before the ticket was opened.

# 21. How do I respond to a ticket?

Log in to the Helpdesk and access the Ticket section> View All, or the Services section> View All;

Click on the Title of the previously opened ticket.

Status of Tickets / Services:

- New: the Ticket has just been opened and is awaiting a response from the MMS Staff;
- On hold: the last answer is from the MMS Staff who are waiting for clarification or feedback from the applicant;
- In progress: the last answer is from the user, the MMS Staff is elaborating the last information provided to solve the problem;
  - Resolved: the problem has been solved! Open the ticket to read the solution.

• Canceled: the ticket has been canceled. You can open it to find out the reason for the cancellation. Tickets that have been "On Hold" for more than 5 days are automatically canceled but it is always possible to reply to a Canceled ticket and change the status accordingly to "In progress".

## 22. Where are the FLEX.log files located?

The .log files are files that monitor all the activities of the tool and are useful for the correct resolution of problems encountered while using the device.

The .log files are present inside the PC on which FLEX is installed in the Local Disk address C: / Flex folder / Defprofile folder / History folder.

To be able to correctly submit the .log files to Tech Support, it will be necessary to create a compressed archive of the History folder with an appropriate software (e.g. Winrar or Zip) so that all .logs can be provided for a quick resolution of the problem.

# 23. How can I request an original file?

Log in to the MMS Helpdesk and access the Ticket> Create New> Original file request section.

Fill out the form to open the Ticket:

- 1. Title: Specify the details of the vehicle or ECU / TCU for which the original file is requested.
  - 2. Send a screenshot of the identification provided by FLEX;
- 3. File read: the file read by the control unit which is supposed to be non-original. The read file is the safest means of finding the information needed to recover the original file.

NB: The file must be plaintext, NOT encrypted.

## 24. How can I find the list of BOSCH numbers compatible with my ECU?

Log in to the Helpdesk and access the Ticket section> Create New> HW BOSCH Number Converter

Choose the operation you wish to carry out:

1. Bosch Number Translator and Compatible Number List:

By selecting this option, by proceeding through the ticket, it will be necessary to enter the Bosch number shown on the ECU label (0281 if it is a Bosch Diesel or 0261 if it is a Bosch Petrol) without spaces between the numbers to then proceed with the calculation of the ECU model and the list of compatible Bosch numbers.

2. Manufacturer Hardware Number Translator

By selecting this option, by proceeding through the ticket, it will be necessary to enter the hardware number of the vehicle manufacturer (VW, Mercedes, etc.) without spaces between the numbers and then proceed to calculate the ECU model and the specific Bosch number.

#### 25. List of Compatible Manufacturer Hardware Numbers.

By selecting this option, by proceeding through the ticket, it will be necessary to enter the Bosch number shown on the ECU label (0281 if it is a Bosch Diesel or 0261 if it is a Bosch Petrol) without spaces between the numbers and then proceed to calculate the Hardware number of the Manufacturer and, if present, the list of compatible Manufacturer Hardware numbers.

#### 26. What is the full backup function and what is it for?

The full backup function allows the reading of the complete contents of the Flash and EEprom memories of the ECU or TCU and saves the contents in a file. Once saved, the file can be rewritten for the restoration to the original state of the unit or an identical copy of the ECU or TCU can be created.

#### 27. What is the virtual read function and what is it for?

The virtual read function is present in protocols in which it is not possible to make a real reading of the ECU file. With the virtual read function in OBD mode, FLEX searches for the original file using the ECU ID in the database of the MMS server, downloads it and then saves the file on the PC.

# 28. What is the Magic Lock function and what is it for?

The Magic Lock function protects the work of MAGICMOTOSPORT customers. Magic Lock allows you to deny access to unauthorized parties or to tuners who do not have the password to the files stored in the ECUs that support this function. Third party tools are also unable to access. By applying this function, your services and solutions can no longer be copied.

## 29. What does the annual subscription include?

- Multilingual technical assistance via chat, ticket, call and remote control system directly on your PC;
  - Software updates;
- 300 free Green coins per month (only for Master users), through which it is possible to request a variety of free services. It is possible to consult the list of services available at the following link: https://www.magicmotorsport.com/documentation/helpdesk-services-list/
- Lifetime warranty: FLEX tools with an active subscription are covered by a lifetime limited warranty. Read the details at the following link: https://www.magicmotorsport.com/documentation/warranty-terms/

#### 30. Can I use FLEX with an expired subscription?

Yes, FLEX will continue to work with the latest software version downloaded before the subscription renewal expiration date. In addition, you will always have access to all updates regarding the corrections of potential bugs found on the protocols downloaded before the subscription expires.

#### 31. Where can I find the video tutorial section?

Visit the page dedicated to video tutorials on the site, click here