

1. INTRODUCTION

Instructions for the D-VO firmware update are presented in this document.

The firmware update of a D-Vo unit can be performed through the software utility *MarelliFlash_V1_x*, that can be copied/pasted in the PC drive and doesn't need installation.

Minimum requirements:

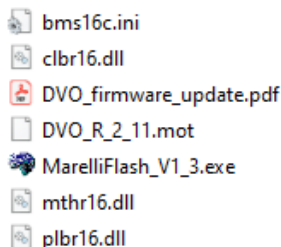
- PC with 1ghz CPU, 256MB RAM, operating system Microsoft Windows® 8 and later.
- PC with USB port.
- USB cable (length < 3m), with a male B-type connector.
- Compressed file *D-Vo Firmware Update vx.xx.zip*, downloadable from:

<https://downloads.marellimotori.com/products/3>

Please follow the below steps:

1.1. PC/Laptop preparation

- a) Extract the compressed folder *DVo_FWupd_x_xx* from the zip file *D-Vo Firmware Update vx.xx.zip* in the PC drive.
- b) The folder *DVo_FWupd_x_xx* contains the following files:

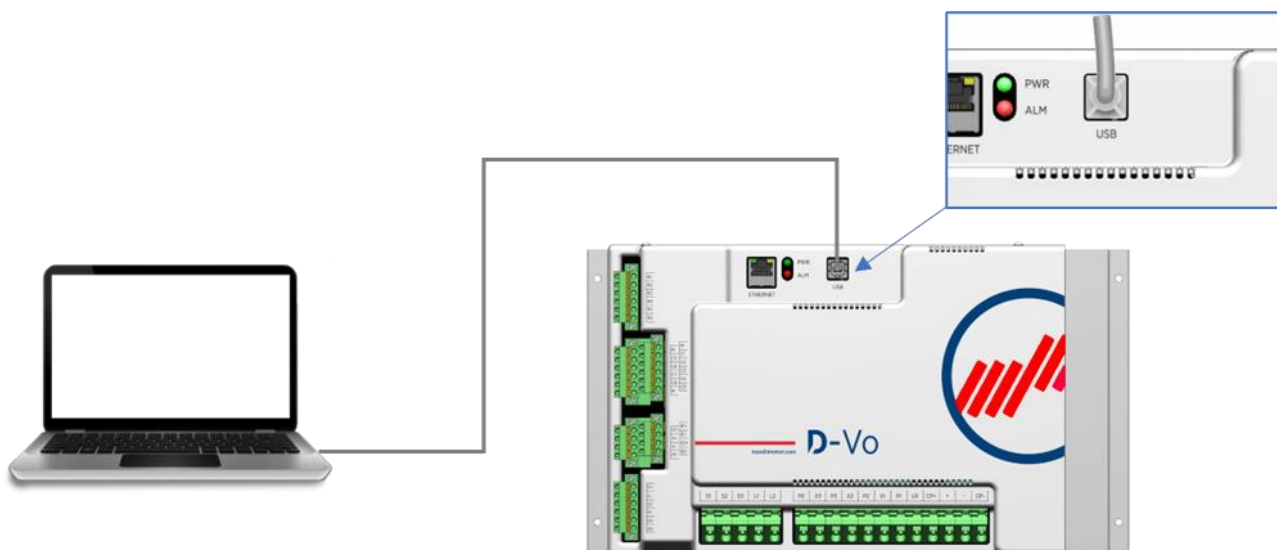


Where:

- *MarelliFlash_V1_3.exe*: firmware update utility
- *D-Vo_R_x_xx.mot*: new firmware file

1.2. D-Vo preparation and connections

- c) Stop the alternator/genset before proceeding; during the following steps, the AVR must not be powered.
- d) Connect D-Vo to the PC via USB cable. USB drivers must have been previously installed in the PC system.
- e) Start *D-Vo Dashboard* utility software, click *Communication/Configure* in the menu bar, select the right COM port, click *Connect* and then save the last parameter configuration in the PC drive (see *D-Vo Dashboard* instructions in the D-Vo User Manual).
- f) Disconnect from *D-Vo Dashboard* by clicking on "Disconnect" button.

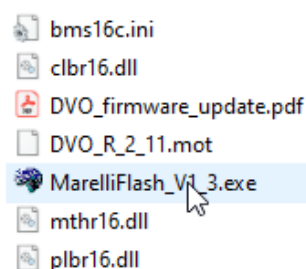


NOTE:

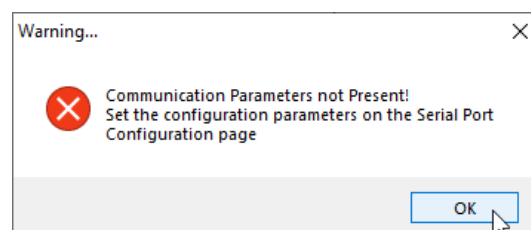
When performing the connection as shown in the figure, that is only using the USB power supply, D-Vo displays the *Auxiliary supply OFF* alarm. The two physical LEDs PWR (green) and ALM (red) shall both be on, with ALM flashing according to the alarm code described in D-Vo User Manual. Until the USB cable is removed, the alarm state shall remain active. Once USB cable is removed, the alarm disappears.

2. FIRMWARE UPDATE PROCEDURE

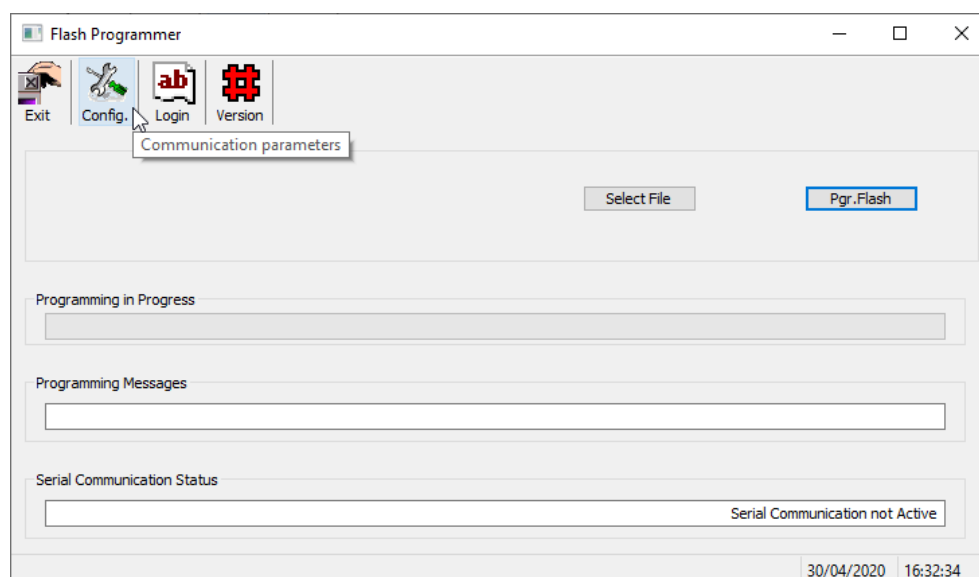
- Close *D-Vo Dashboard* software utility before proceeding with the following steps.
- Click the application *MarelliFlash_V1_x.exe*.



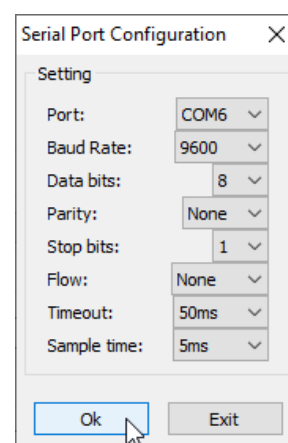
- A warning message appears. Click OK and proceed.



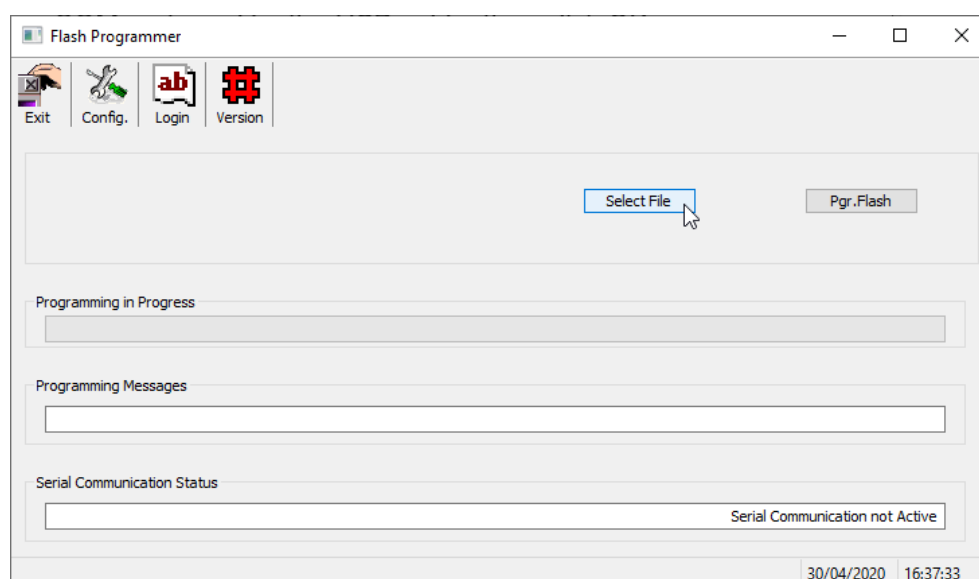
- The operating window appears.



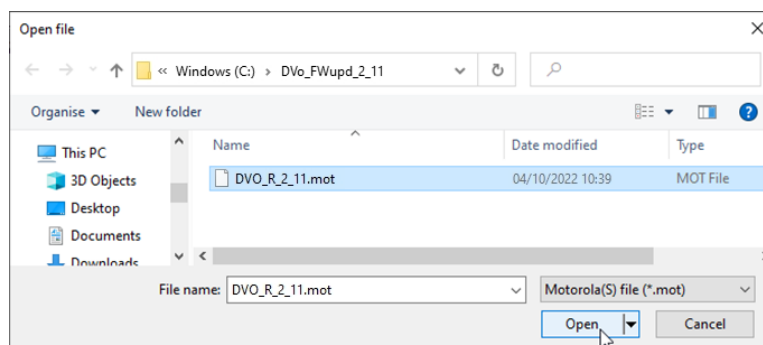
- e) Click on button *Config.*
- f) The *Serial Port Configuration* window appears; check that the Port number selected corresponds to the COM port used by the USB cable, then click OK.



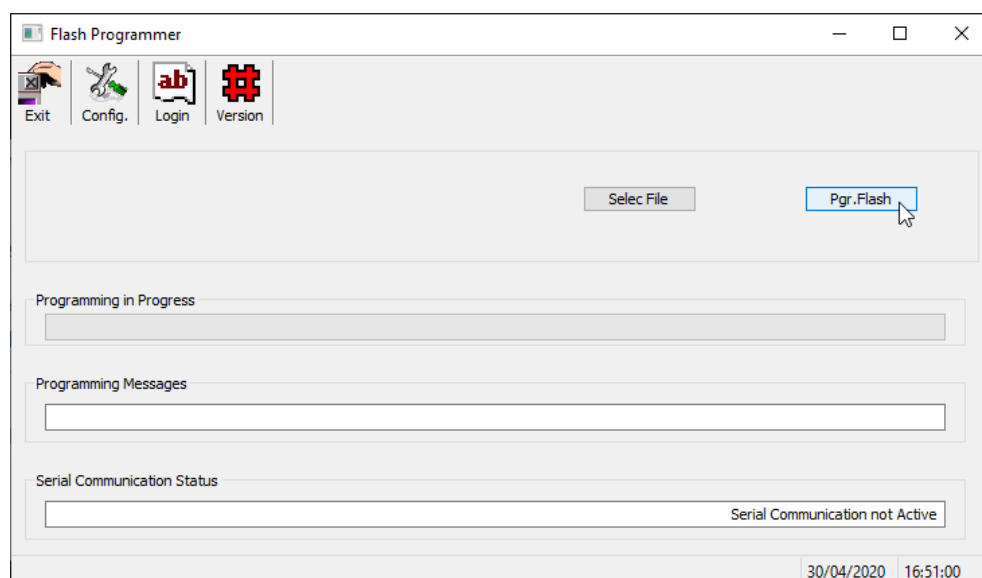
- g) Click *Select File* button.



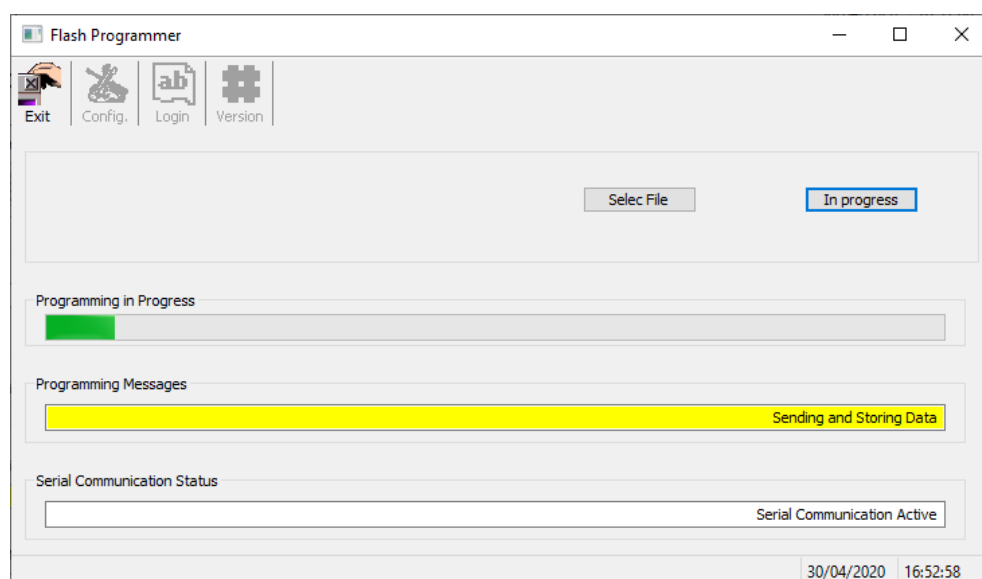
h) Select the firmware *.mot in folder *DVo_FWupd_x_xx*, then click open.



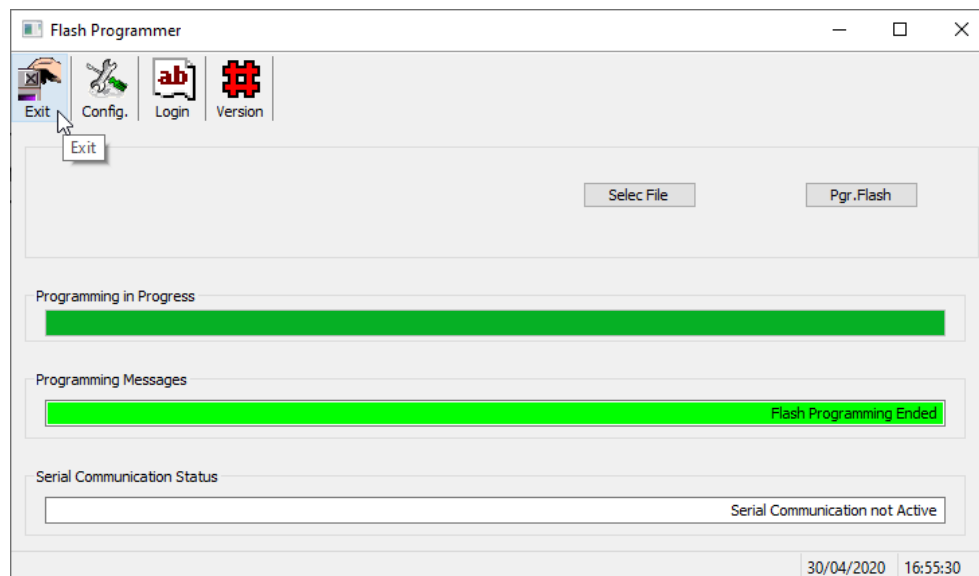
i) Click *Pgr.Flash*:



j) The program starts updating the firmware.



- k) The program takes 2-3 minutes to complete the operation; it ends when the operating window appears as in the following figure and the *Programming Messages* field shows the message *Flash programming ended*.

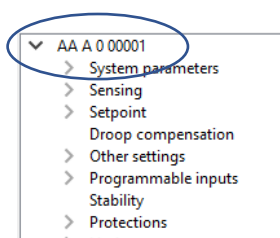


- l) Once the update process has positively ended, click “Exit” to close the program.
 m) Wait at least 10 seconds with the USB cable plugged to D-Vo unit, then remove it once before reconnecting and proceeding with the following steps.
 n) Start *D-Vo Dashboard* software utility, click *Communication/Configure* in the menu bar, select the right COM port and click *Connect*.
 o) Click *Reset* button (keep it pressed for at least 1s).
 p) Disconnect *D-Vo Dashboard*.
 q) Remove the USB cable, then plug it again.
 r) Start *D-Vo Dashboard* software utility and proceed to retrieve the stored parameter configuration.

IMPORTANT NOTE:

In the special case of update from the firmware release 1.xx to the firmware release 2.xx (e.g. from 1.25 to 2.11), it is possible that the D-Vo unit serial number is reset to a default value (e.g., AA A 0 00001) at the end of the update process. Please mind that this is not an issue, but the consequence of a main firmware root change.

The original serial number is anyway available in the unit nameplate, on the D-Vo unit body.



IMPORTANT NOTE: It is always good practice to check at least once all the configuration parameters before restarting the generator.