



QUICKSTARTGUIDE DPLoader

English

Manual number: QS-DPLOADER-V1.1EN

1. Introduction

This manual uses an example to show how a firmware update is carried out on an xtremeDB module. For the sake of simplicity, this is shown on a J1939 module. The procedure is exactly the same for a CANopen module.

As a rule, no major changes are made to the firmware and the updates are downward compatible. Nevertheless, an update of running modules is only recommended after consultation with DATA Panel GmbH's technical department or support. Incorrect operation can cause irreparable damage to people and module(s).



Products and Accessories

xtremeDB PCAN Programming Cable

<https://www.data-panel.eu/dp-pcable01>

Optional 24 V power supply unit for programming outside a machine

<https://www.data-panel.eu/en/dp-ps24v/>

CAN splitter

<https://www.data-panel.eu/en/products/splitter-blocks/can-splitters/>



USB to CAN Adapter

<https://www.peak-system.com/PCAN-USB.199.0.html>

2. Download and installation of the programming tool DPLoader

- The Windows software [DPLoader](#) was developed especially for updates of the xtremeDB module firmware. It can be downloaded using the permalink above.
- ➔ **Unzip the downloaded *.zip file to the desired destination directory.**

3. Download and unzip the firmware file

All necessary files are available in the download area of the respective module in the DP Shop or via the following permalinks in the latest version:

Module variant SAE J1939	Module variant CANopen
DP-34044-1-000	DP-34044-1-200
DP-34044-2-000	DP-34044-2-200
DP-34044-3-000	DP-34044-3-200
DP-34044-5-000	DP-34044-5-200
DP-34044--0007	

- ➔ **Unpack the firmware *.hex file into the desired target directory**

4. Wiring diagram

- Plug a 120 Ohm terminating resistor e.g. [DP-34042-747](#) into one of the CAN ports of the module.
- Connect the other CAN port of the module to the PCAN adapter and to a power supply, e.g. [DP-PS24V](#). This can be done comfortably with the Data Panel line [DP-PCABLE01](#).
- Remove all additional connection cables from the I/O ports. The module calibrates itself automatically and detects connected cables that can lead to incorrect results during calibration.

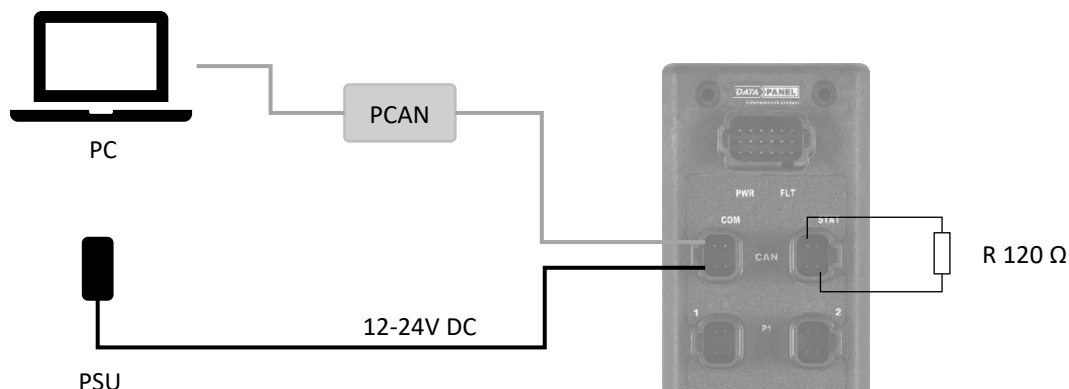


Attention: Before updating the firmware, remove all connected I/O cables.

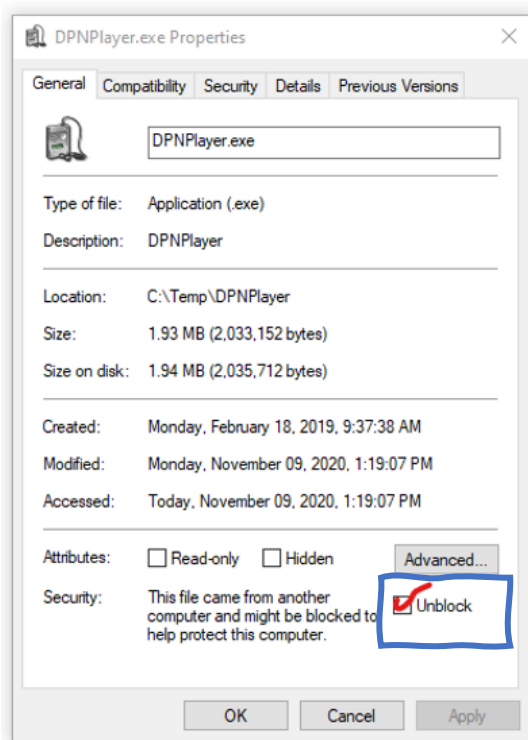
- Finally, connect the PCAN Adapter to a free USB port of your PC.



Attention: A firmware update via an unstable voltage source such as a 9 V battery or during the starting process of an engine is not permitted.



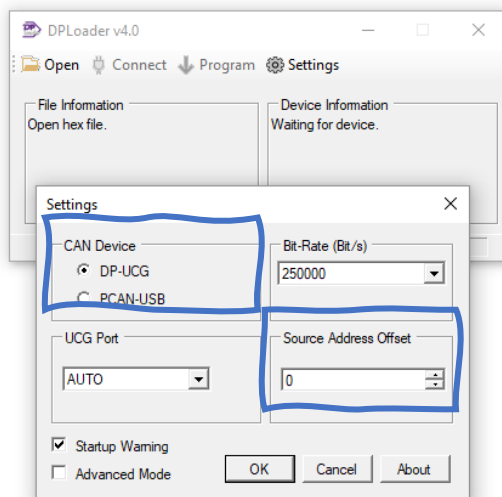
5. Starting, configuring and update



Start the programming software DPLoader.exe from the path of step 1.



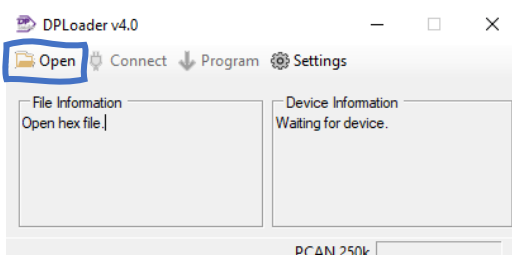
If an error message from Microsoft Defender SmartScreen appears, access must be enabled in the file properties (right mouse button -> Properties) of DPLoader.exe.



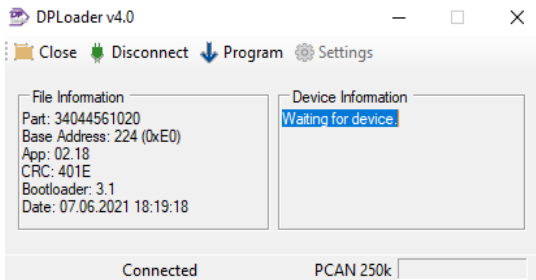
Select the programming adapter **PCAN-USB** used in the settings of the DPLoader from the path of 2.



If an address offset has been set for the module by means of wire jumpers in the 18-pin connector, this offset must be entered in the **Source Address Offset** field.



Open the firmware *.hex file you unzipped in step 2 using the **Open** button.

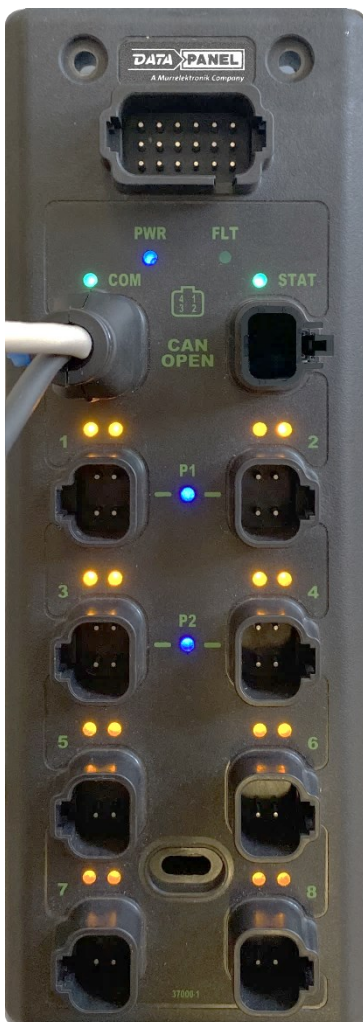


The file information is then displayed in the left-hand area.

Establish a connection using the **Connect** button and then start the flashing process with **Program**.



Caution: Interrupting plug connections or the failure of the power supply during the update process can lead to irreparable damage to the module.



All LEDs light up, after which it is mandatory to perform a power reset on the module. The newly calibrated values are stored in the EPROM and are only reset after a power reset.



Attention: After all LEDs have lit up successfully, perform a power reset on the module to start the self-calibration process.



Attention: While self-calibration is executed, IO cables have to be unplugged.

Congratulations, you have successfully updated your module!



The information contained in the document has been prepared with the greatest possible care. Liability for accuracy, completeness and up-to-dateness is limited to gross negligence.