



# How to update the firmware of the FrSky XMR receiver

## Introduction

FrSky XMR receiver doesn't have any S.Port (nor a S.Bus). Thus, the firmware update is not the same than X6R, X8R, etc. receivers. The main reason to update the firmware (other than bug fixes) is to switch between the EU-LBT (European standard) and the FCC (rest of the World) protocol.

Generally speaking, if your XMR has been purchased from an European dealer, the default firmware will be EU-LBT. In the same way, a XMR purchased outside of the European zone, will be flashed with the FCC firmware.

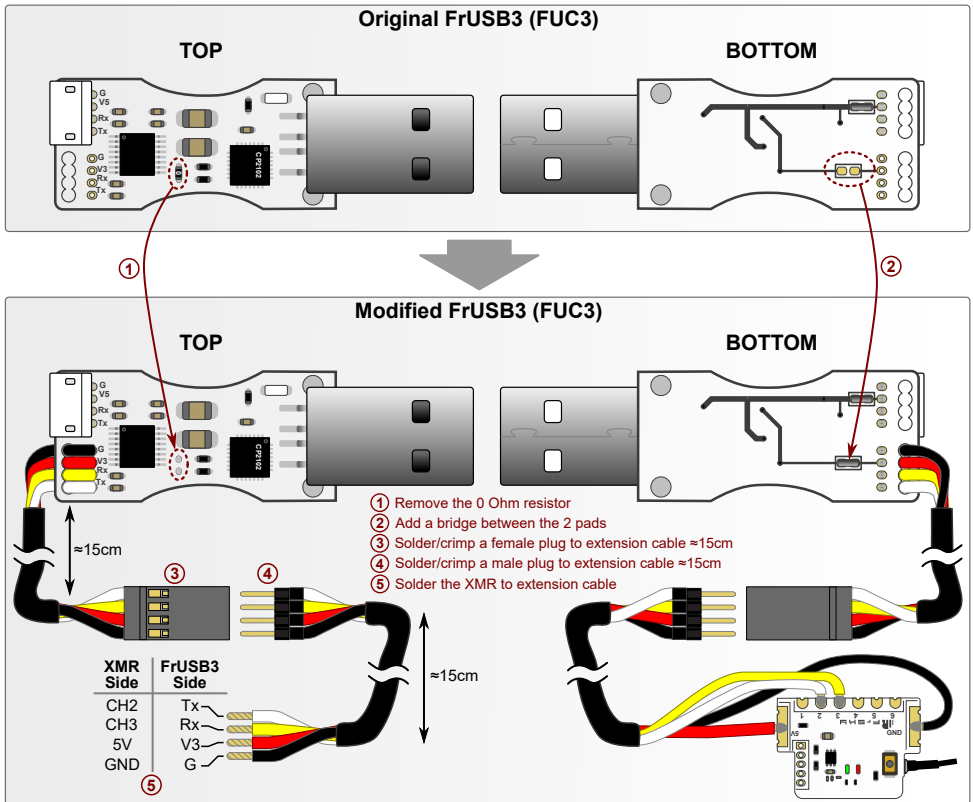
## Required hardware and files

- FrSky XMR receiver
- FrSky FrUSB3 (FUC3)
- Soldering equipment for working on PCB (Printed Circuit Board)
- Desoldering equipment for working on PCB (Printed Circuit Board)
- Colored electric wires (4x colors, gauge about 22 AWG, length about 30cm )
- Pair of plug connector male and female with 4 contacts for electric wires (recommended 22 AWG)
- PC computer equipped with Windows 7 operating system or above
- On [www.frsky-rc.com](http://www.frsky-rc.com) download "frsky\_update\_sport\_rev##" software for FrUSB3 (FUC3) product
- On [www.frsky-rc.com](http://www.frsky-rc.com) download last firmwares for FrSky XMR receiver

## Preliminary modification of FrUSB3 or FUC3

**WARNING :** Once the modification described below has been done, you can't use it anymore to flash classical receivers with S.Port.

Please modify FrUSB3 (FUC3) as described in the following illustrations.

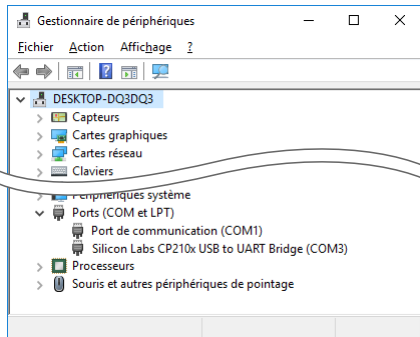




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## FrUSB3 (FUC3) driver

The driver of FrUSB 3 is usually installed automatically on PC computer with Windows 7 (or above), when plugged to the computer the first time. However, if the driver installation fails, download the drivers from : [https://www.silabs.com/documents/public/software/CP210x\\_Windows\\_Drivers.zip](https://www.silabs.com/documents/public/software/CP210x_Windows_Drivers.zip), decompress then launch the installer corresponding to your version of Windows.



### How to check if the drivers are successfully installed

- 1 - In Windows OS, open "Configuration panel" window or "Parameters" window.
- 2 - From this window, select the field "Search". Enter "Device Manager" then click to search result.
- 3 - You should obtain this left illustration.
- 4 - Check if the line "Silicon Labs CP210x USB to UART Bridge" does exist under the heading "Ports (COM and LPT)". If you can't find the line, then the FrUSB3 (FUC3) has failed.
- 5 - You must remember the COM port number (at the end of the "Silicon Labs" line). Knowing this number is mandatory for the next step. In this illustration the COM port number is 3. On your computer it can be any number depending of the installed hardware.

## How to update the firmware of the FrSky XMR receiver

- 1 - Download the latest XMR firmware from the official FrSky website: [www.frsky-rc.com](http://www.frsky-rc.com).

After unpacking the archive, you will get two files:

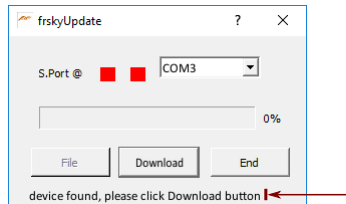
- **XMR FCC aammjj.frk** for the non-European version
- **XMR LBT aammjj.frk** for the European version

Note : **aammjj** represents the date of the version, **aa** for the year, **mm** for the month, **jj** for the day.

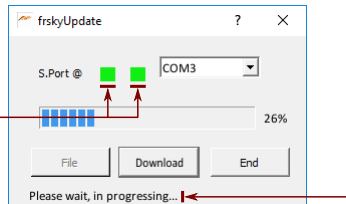
- 2 - Download the FrUSB3 (FUC3) software from the FrSky website [www.frsky-rc.com](http://www.frsky-rc.com) from product's page. After unpacking, you will obtain several files. The executable file which must be launched is named : **frsky\_update\_sport\_rev###.exe** (with ### is version number).
- 3 - Plug your FrUSB3 to the computer
- 4 - Launch as administrator (right click for the command) the software **frsky\_update\_sport\_rev###.exe**.
- 5 - Select the COM Port of FrUSB3 listed in the "Device manager" (see previous paragraph)

- 7 - Plug the XMR to the FrUSB3 by connecting female plug ③ to male plug ④.

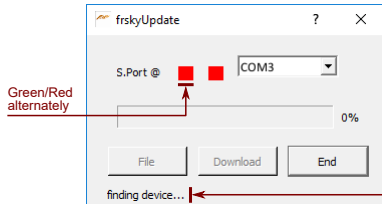
This operation results in the discovery of the XMR by the FrUSB3. After plugging the XMR, the message "device found" should appear.



- 8 - Click on the "Download" button in order to launch the firmware update procedure of the XMR. Green and red LEDs will be blinking during the flash progress. The bar will indicate the flash progression. The status will display "Please wait, in progressing...".



- 6 - Click on "File" button, then select the firmware file : **XMR FCC aammjj.frk** or **XMR LBT aammjj.frk**. The status will display "finding device...".



- 9 - When the transfer is completed, the progress bar indicates 100%, the status changes to "Firmware is updated". Red led will be steady on.
- 10 - Quit the software by clicking on the "End" button.
- 11 - Unplug the XMR to the FrUSB3 by disconnecting female plug ③ from male plug ④.
- 12 - Desoldering the XMR from his extension cable. The XMR is now ready to be used. You can bind it and install it in your model.