en/HottUpdate

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1 Software for the Update

The necessary software **V4** for the Graupner Transmitter/Receiver as well as the necessary language files you can download direct from the Graupner Homepage.

Important for the update is that you choose the correct file. Each software file has the appropriate number in the file name.
EXAMPLE: The receiver GR-16 (No.**33508**) becomes the Update-File "**33508**_gr_rx8_4a90_f9.bin"

1.1 Voice file

The MikroKopter needs a MikroKopter-specific voice-file for the HoTT-Transmitter. The name for e.g. the english File is *English_Mikrokopter_V2.vdf*.
There some speech-samples are substituted by MikroKopter-specific samples.
If you would use the old file, the Transmitter would speak "maximum voltage" instead of "Calibrating".

You can download the voice file directly from Graupner. It is include the Software package you can download there for your transmitter.

2 Update the transmitter

In order to provide the latest software to the transmitter you have two opportunities:

- Either way you use a Micro-SD-Card which can be insert into the transmitter to download the needed software into the transmitter.
- Or - the transmitter will be connected via an USB-cable to the PC. Via the Graupner Program "grStudio" you can download the new software.

INFO: An update of the transmitter via a Micro-SD-Card is only possible since "V4"!
Transmitter with the firmware "V3" need to download the new firmware via the program "grStudio".

2.1 Video

3 Update transmitter - Opportunity 1: Micro-SD-Card

The needed files you can copy in an appropriate folder on the Micro-SD-Card.
This Micro-SD-Card you insert into the transmitter and import the software via the "Hidden Mode".
(Actual instructions => MX-20 = page 22+28 / MC-32 = page 23+32).

3.1 Prepare Micro-SD-Card

To import the software via the Micro-SD-Card there must be certain directories on the Micro-SD-Card.
The necessary directories (folder) can be done automatically from the transmitter to the Micro-SD-Karte.

For that you need to:

- open the battery box from the transmitter and
- insert an empty Micro-SD-Card into the den Micro-SD-Card-Slot.
- Now you switch ON the transmitter.
- After the complete boot of the transmitter you can switch the transmitter OFF.
- Remove the Micro-SD-Card.

Now you can insert the Micro-SD-Card into an appropriate slot at your PC.
Here you will find now the following directories:

If you have downloaded the needed firmware or language files you can copy them now into the appropriate folder on the Micro-SD-Card.

Here i.e. you copy the needed firmware file for the MX-20 in English (mx-20_1v119_English.bin) into the folder ***Firmware*** on the Micro-SD-Card.

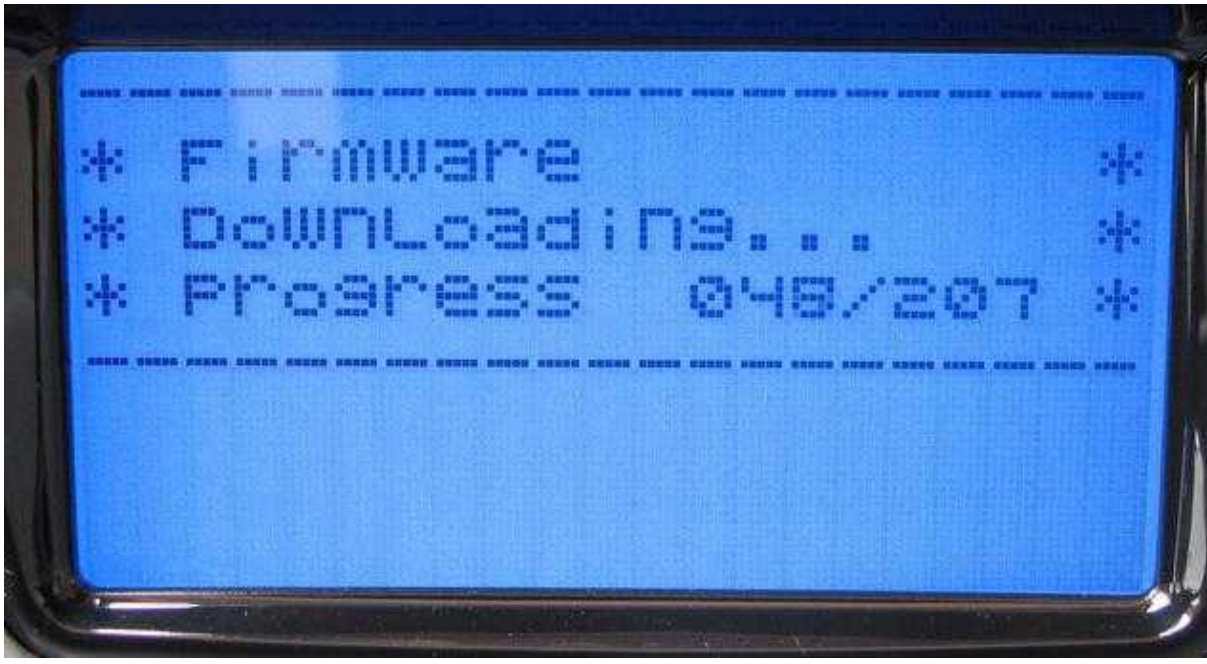
3.2 The Update via Micro-SD-Card

If you have prepared the Micro-SD-Card in that way you continue as follows:
(Example: Fimware Update)

1. Insert Micro-SD-Card into the transmitter.
2. Switch ON the transmitter.
3. With the key combination "left Touch-Pad **UP/DOWN** and the "Right Touch-Pad **SET**" (press to the same time) you will get into the menu ***Hidden Mode***.

4. In the menu "Hidden Mode" you need to select the entry "FIRMWARE UPDATE".

5. Now you can choose the needed Firmware.
   -

6. After confirming with **SET** the firmware will be installed.
   - 

After a successful installation the transmitter will boot new and you can use now the transmitter.

If you want to install a language file into your transmitter you do it in the same way. But - you need to select ***VOICE TRIG*** under Point 4.

4 Update transmitter - Opportunity 2: Program grStudio

INFO

To update the transmitter with the program **Firmware_Upgrade_grStudio_Ver-X.X.exe** you must install the COM-Port Driver **CP210x - Silicon Labs** before!

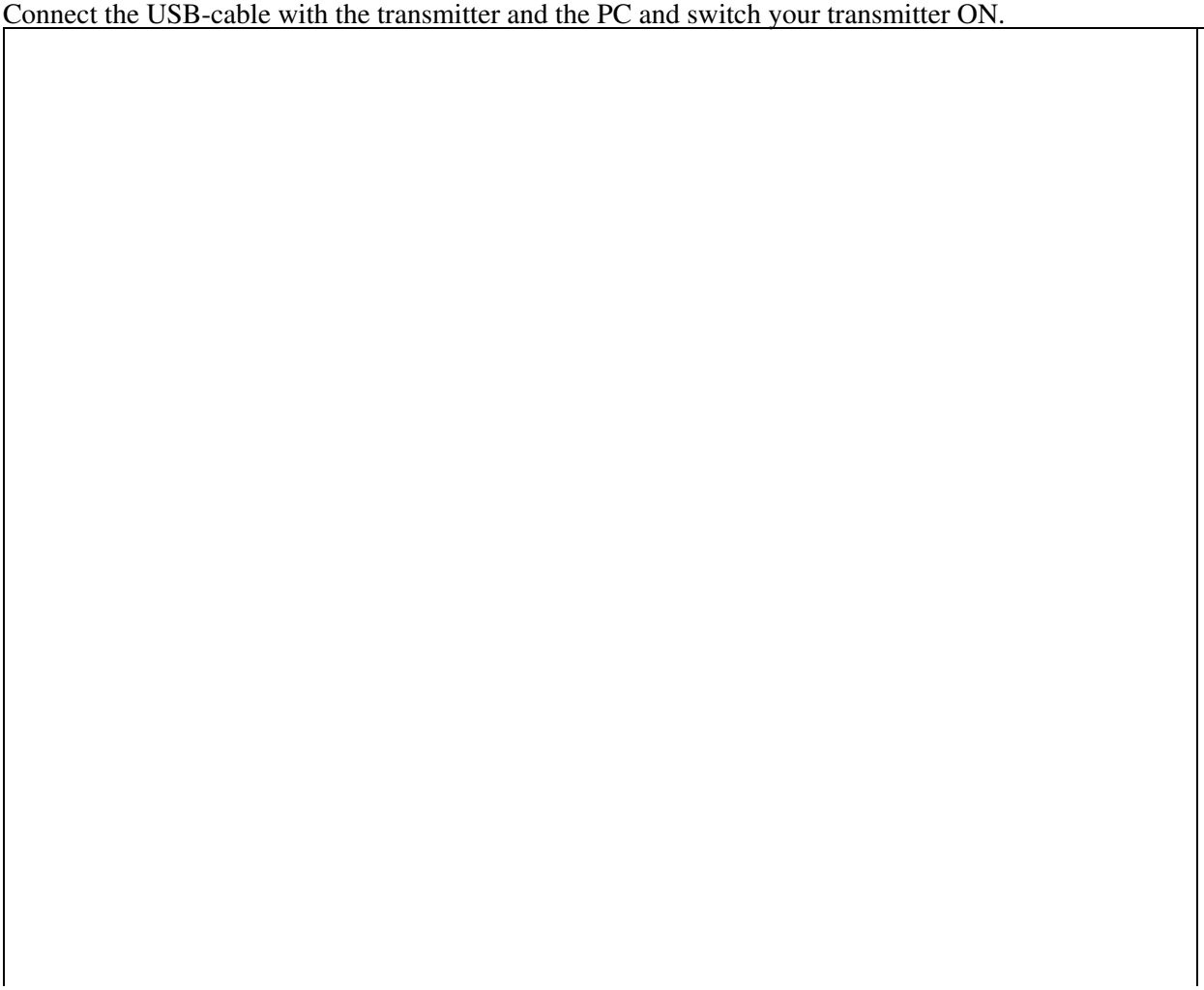
This driver you can download directly from the homepage of Graupner. If you download there the current "V4" you will find the driver in the folder "USB Driver".

(Instruction => MX-20 page 39 / MC-32 page 44)

4.1 Update via grStudio

To update the transmitter with the program **Firmware_Upgrade_grStudio_Ver-X.X.exe** you need to continue in that way:

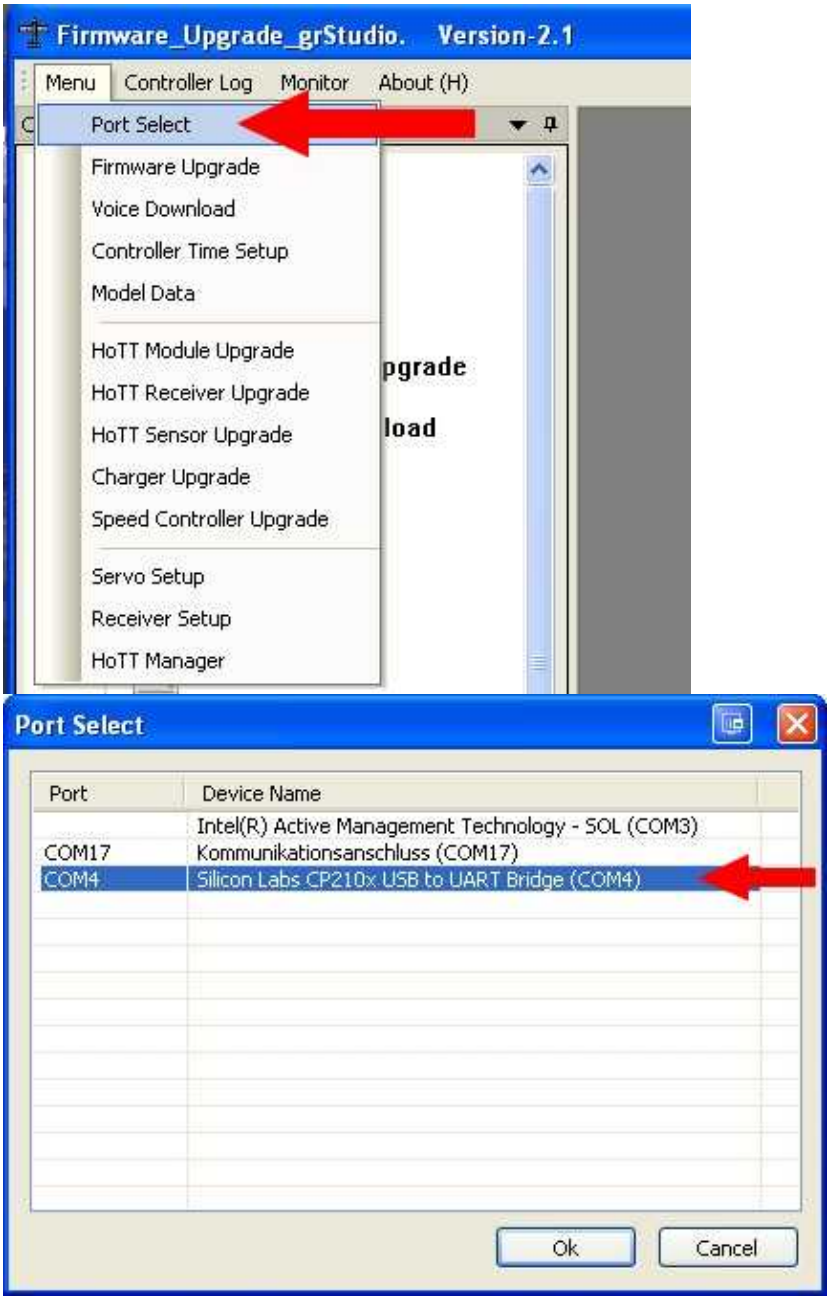
1. Connect the USB-cable with the transmitter and the PC and switch your transmitter ON.



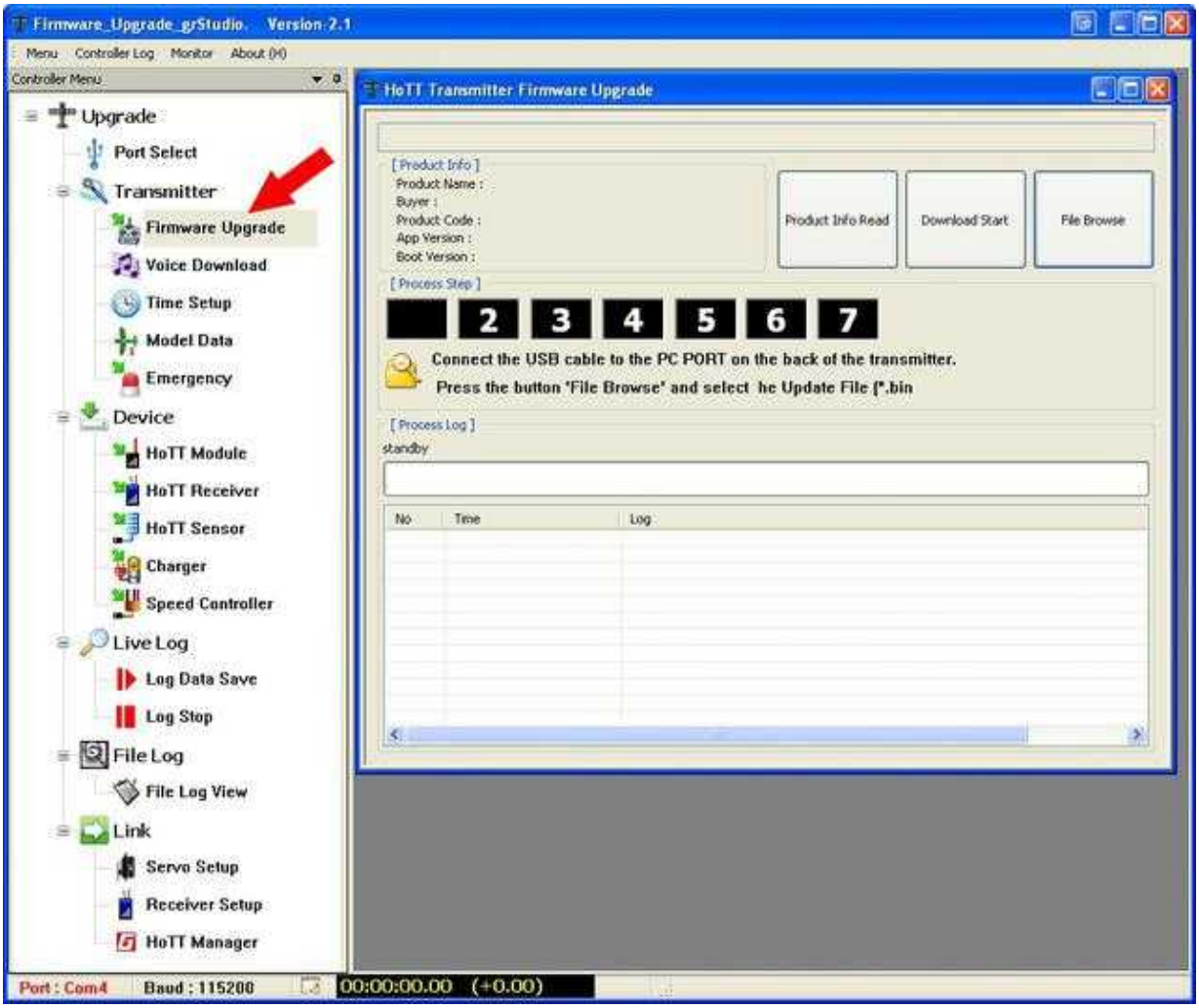
Graupner
mx-20
2.4GHz
No. 33124
DATA
S + -
FC
CE
Made in China FCC ID: ZKZ-mx16-20
D.S.C. EARPHONE

Example: MX-20	Exan

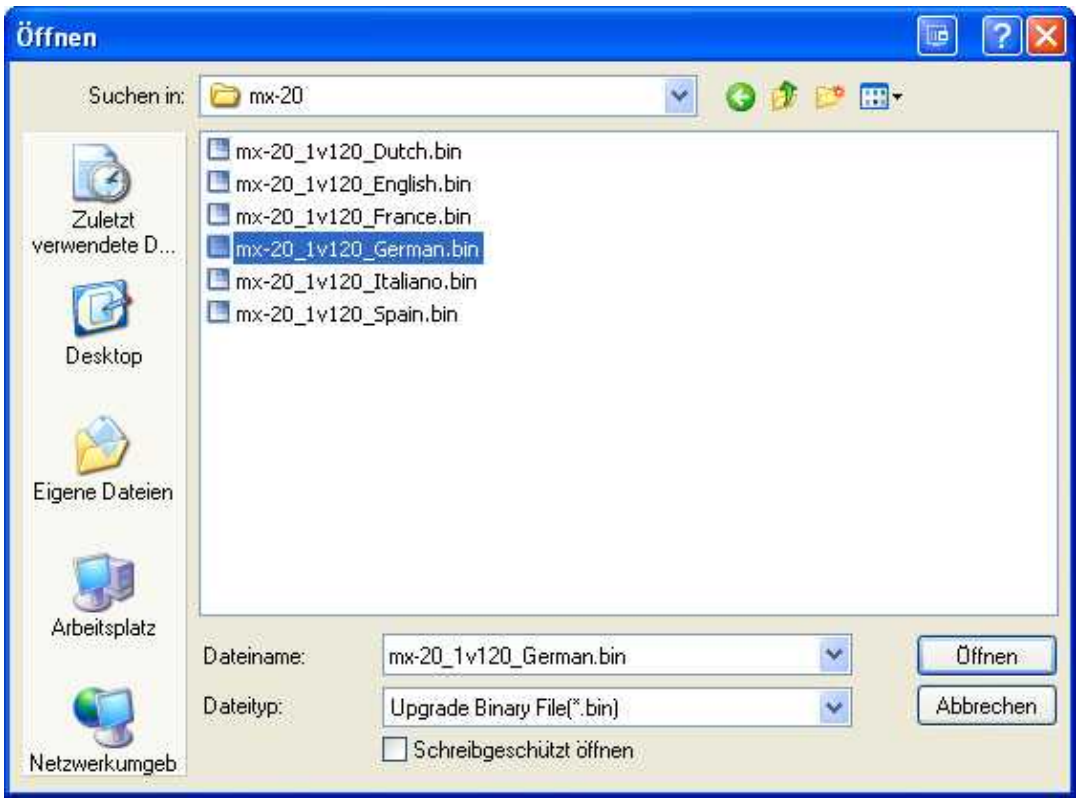
2. Open program **Firmware_Upgrade_grStudio_Ver-X.X.exe** and select the COM-Port for the **CP210x - Silicon Labs**.



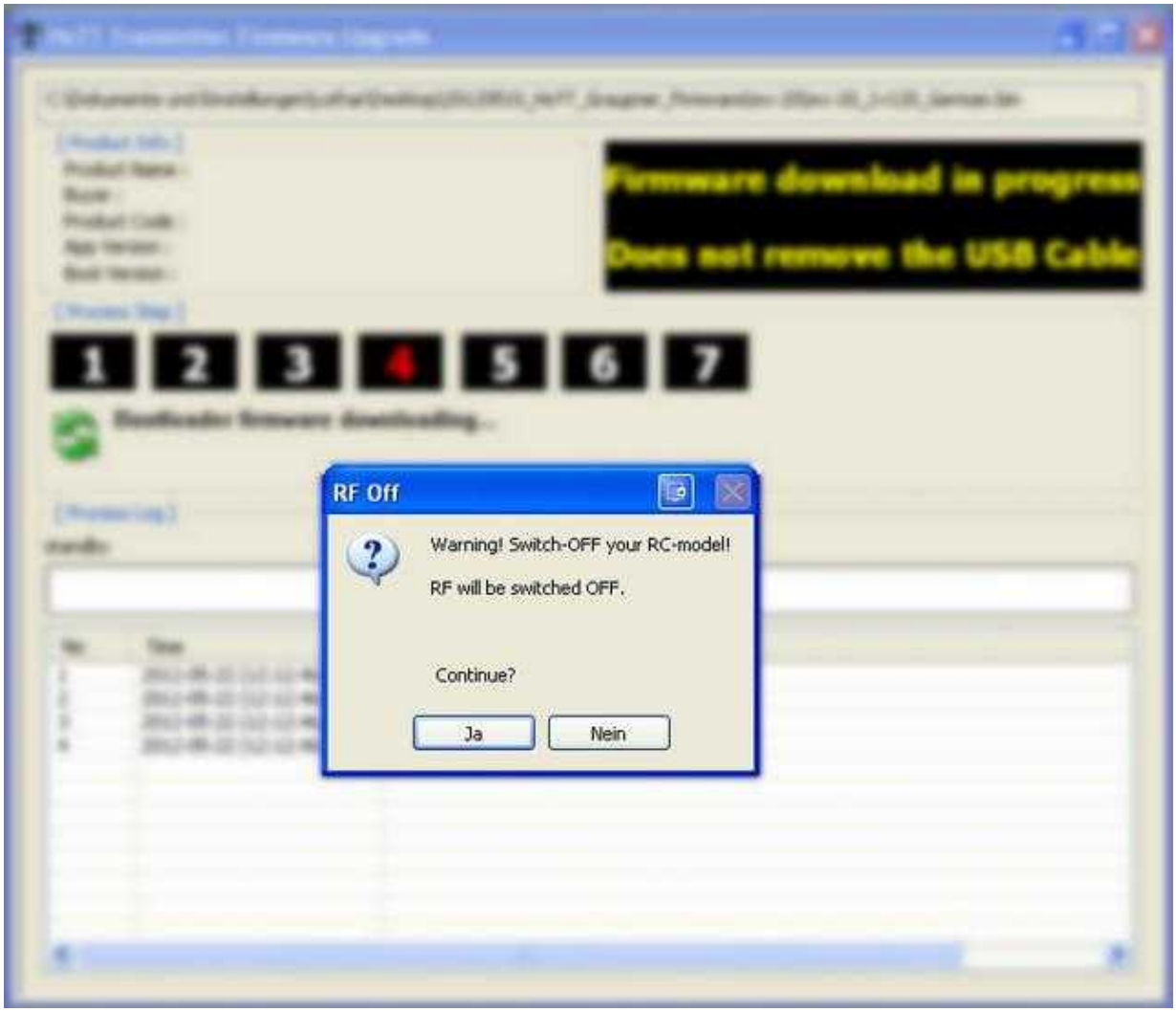
3. Now you select under **Transmitter** the **Firmware Upgrade**.



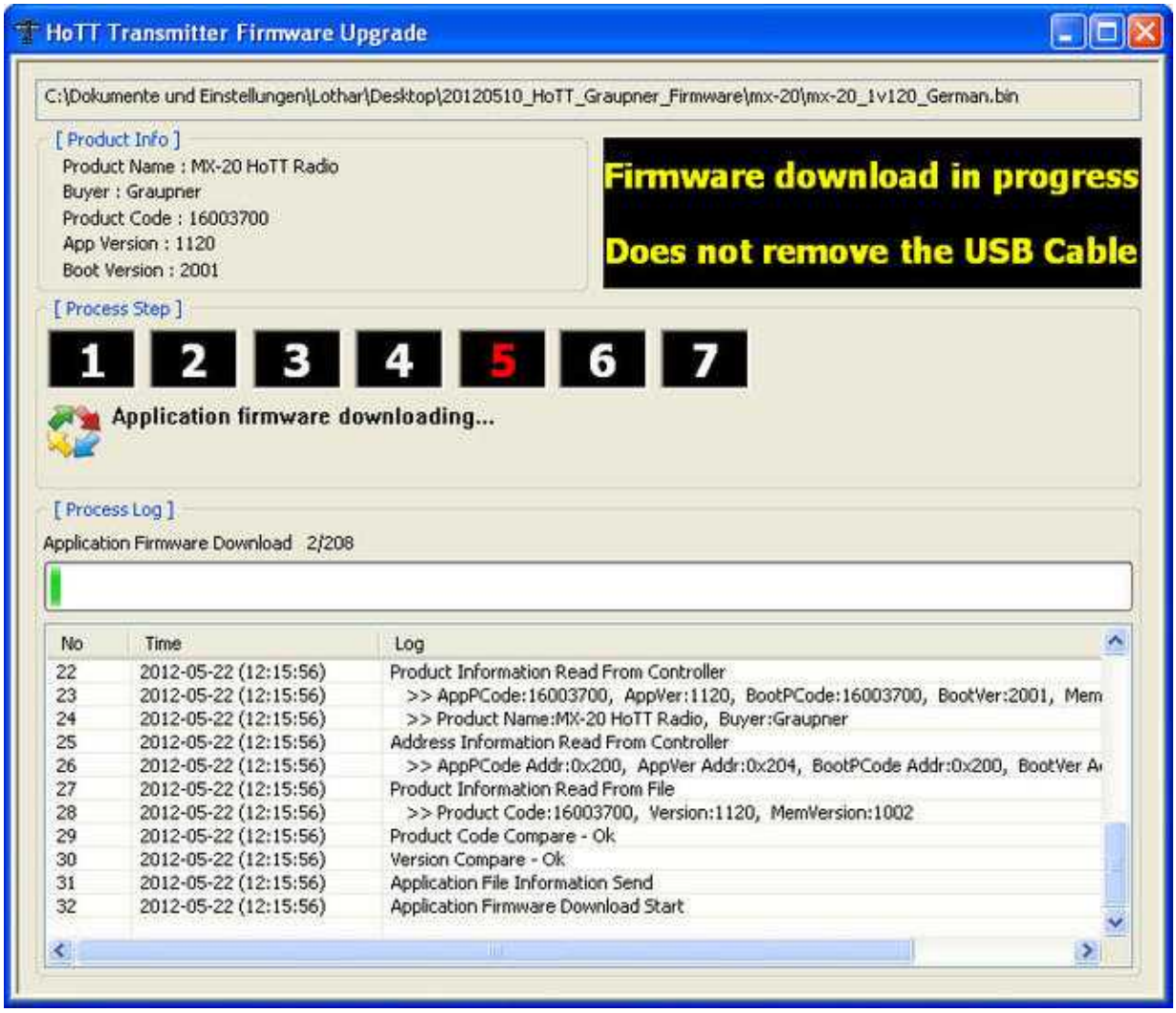
4. Via the button **File Browse** you select the appropriate Firmware.



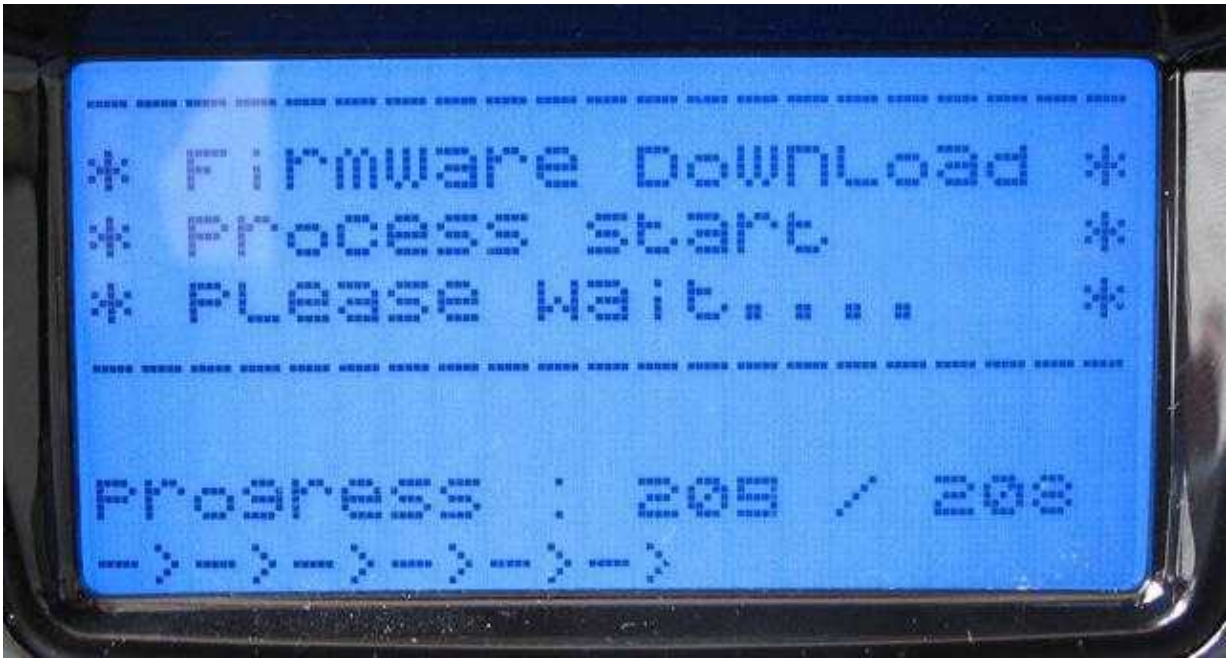
5. Now you can start the update via the button **Download Start**.
6. It appears here now an information window which will be confirmed after reading.


Firmware download in progress
Does not remove the USB Cable
1
2
3
4
5
6
7
RF Off
Warning! Switch-OFF your RC-model!
RF will be switched OFF.
Continue?
Ja
Nein

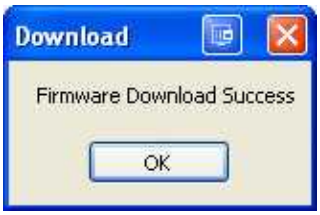
7. Now the update is in process.



8. The update will be also displayed on your transmitter.



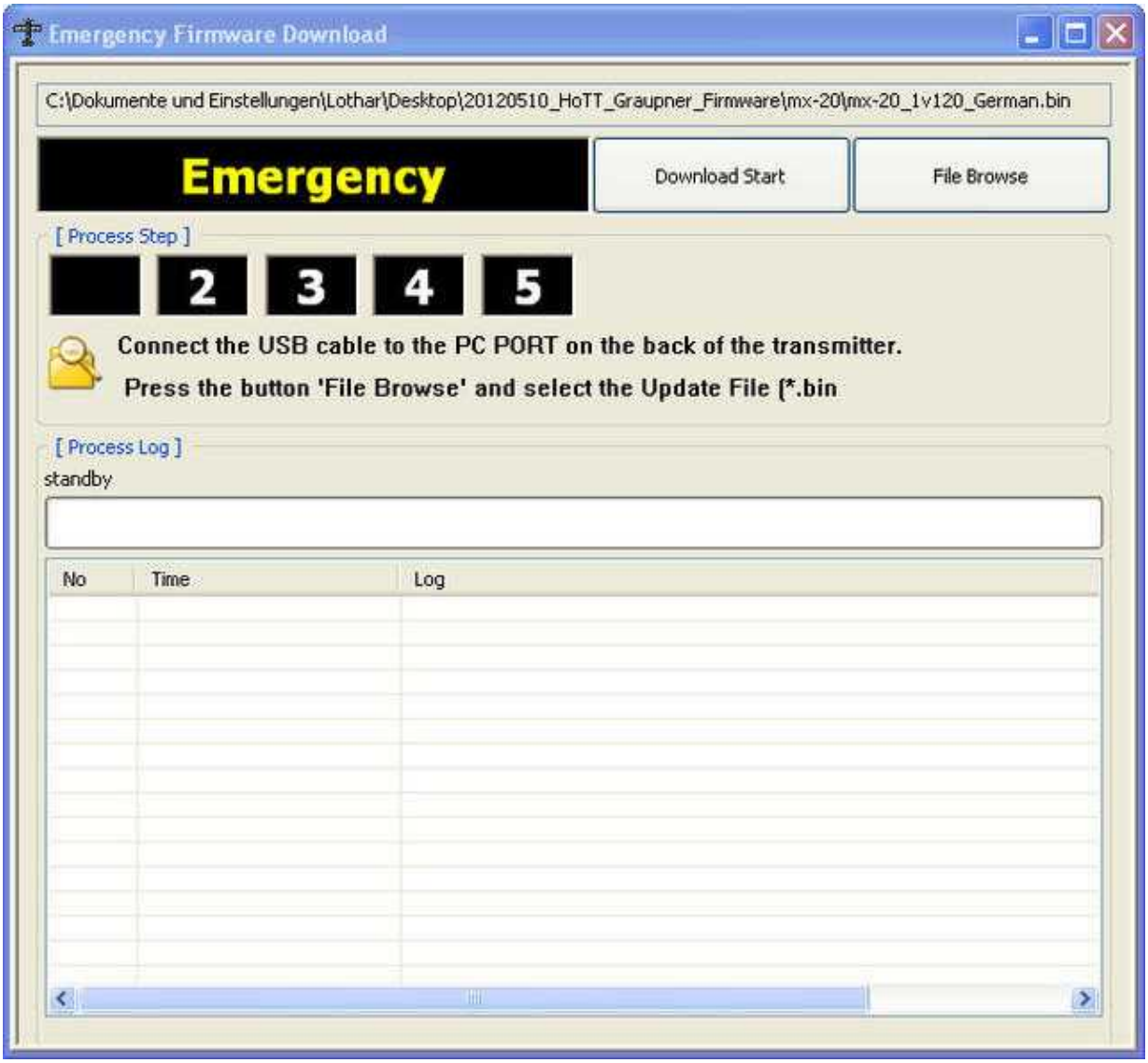
9. After a successful installation the transmitter will boot new and you can use now the transmitter.

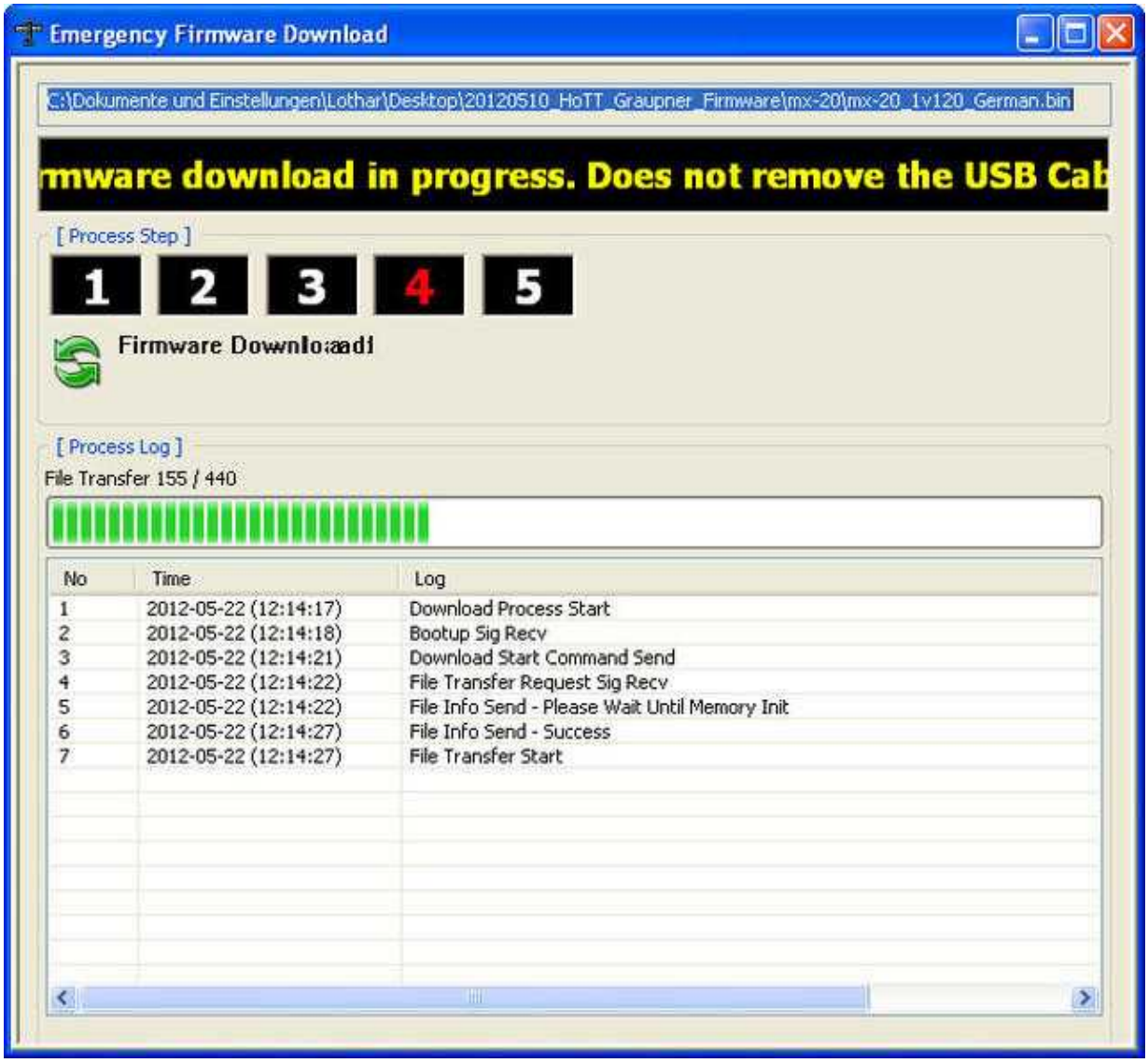


4.2 Blue screen

⚠ If the update was unsuccessful and you will see only an empty illuminated display you need to download the Bootloader and the Software again.
In the Graupner Program "Firmware_Upgrade_grStudio_Ver-x.x.exe" is help provided in the left menu bar under **Transmitter** and **Emergency**.
The download of the software ist pretty much similar to the Update.

- Select with the button **File Browse** the necessary Firmware.
- Start with the button **Download Start** the recovery of the transmitter.
- Switch ON the transmitter (if the transmitter will not switch ON - just disconnect the battery on time).


Emergency Firmware Download
C:\Dokumente und Einstellungen\Lothar\Desktop\20120510_HoTT_Graupner_Firmware\mx-20\mx-20_1v120_German.bin
Emergency
Download Start
File Browse
[Process Step]
2
3
4
5
Connect the USB cable to the PC PORT on the back of the transmitter.
Press the button 'File Browse' and select the Update File (*.bin
[Process Log]
standby
No
Time
Log

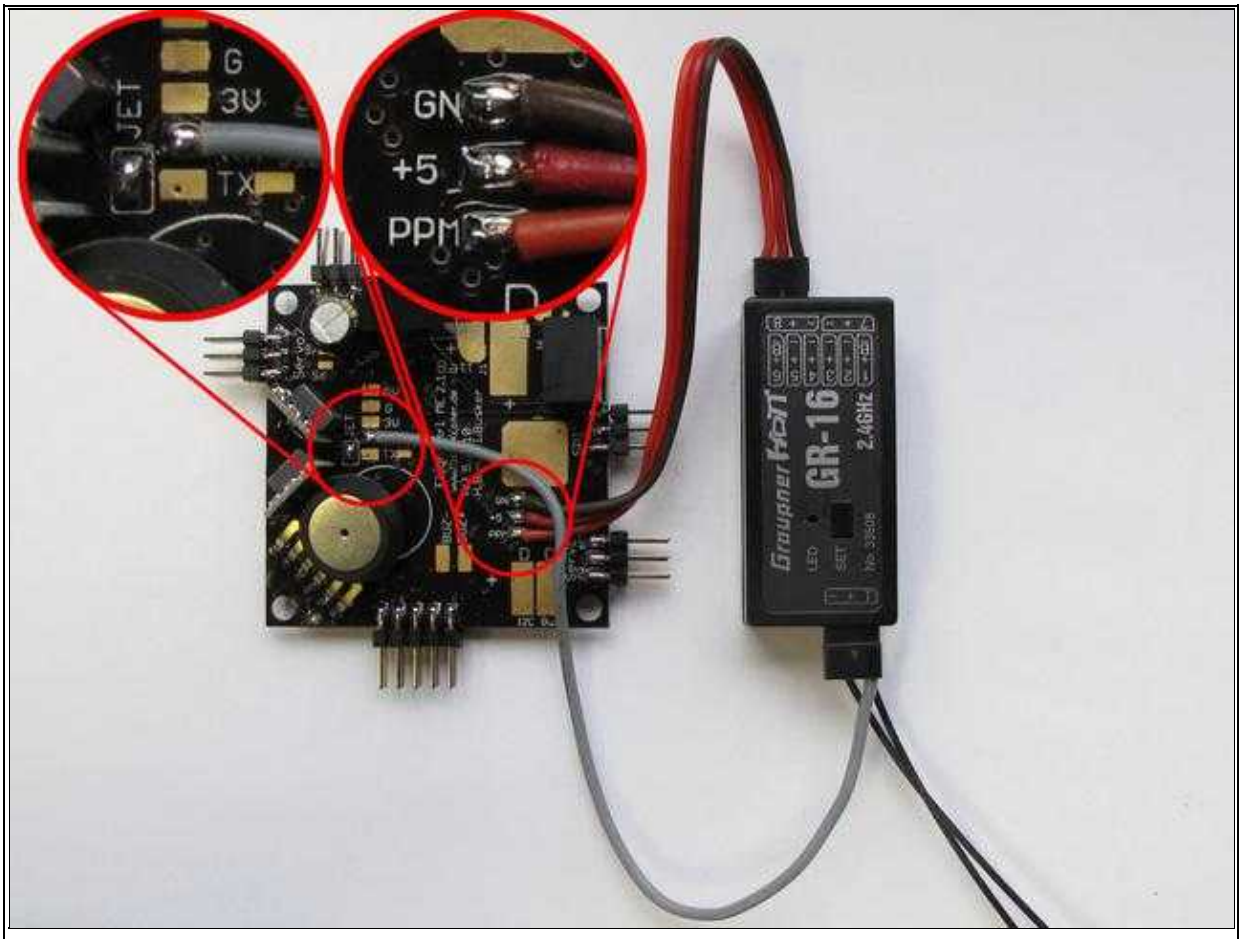

Emergency Firmware Download
C:\Dokumente und Einstellungen\Lothar\Desktop\20120510_HoTT_Graupner_Firmware\mx-20\mx-20_1v120_German.bin
mware download in progress. Does not remove the USB Cab
[Process Step]
1
2
3
4
5
Firmware Downloaad!
[Process Log]
File Transfer 155 / 440
No
Time
Log
1 2012-05-22 (12:14:17) Download Process Start
2 2012-05-22 (12:14:18) Bootup Sig Recv
3 2012-05-22 (12:14:21) Download Start Command Send
4 2012-05-22 (12:14:22) File Transfer Request Sig Recv
5 2012-05-22 (12:14:22) File Info Send - Please Wait Until Memory Init
6 2012-05-22 (12:14:27) File Info Send - Success
7 2012-05-22 (12:14:27) File Transfer Start

5 Update Receiver with the Program grStudio

If you want to make an Firmware-Update with your receiver you can do it either way via the Graupner "USB-Adapter" or the FlightControl.

If you want to do the Update via the FlightCtrl there must be a software version installed V0.86 or higher.

IMPORTANT: Updating via the FlightCtrl the MK-USB must be connected direct to the FlightCtrl (not via the Navi!).
The Graupner receiver is here as usual connected to the FlightCtrl via the PPM-cable and also the telemetry cable.



(Example image) To enlarge -> Click on the image

5.1 Download the required software

Before you can start the Update on your receiver you need to download the appropriate "Update-File".

Infos you will find under: **Software for the Update**

5.2 Bring FlightCtrl into Update-Mode

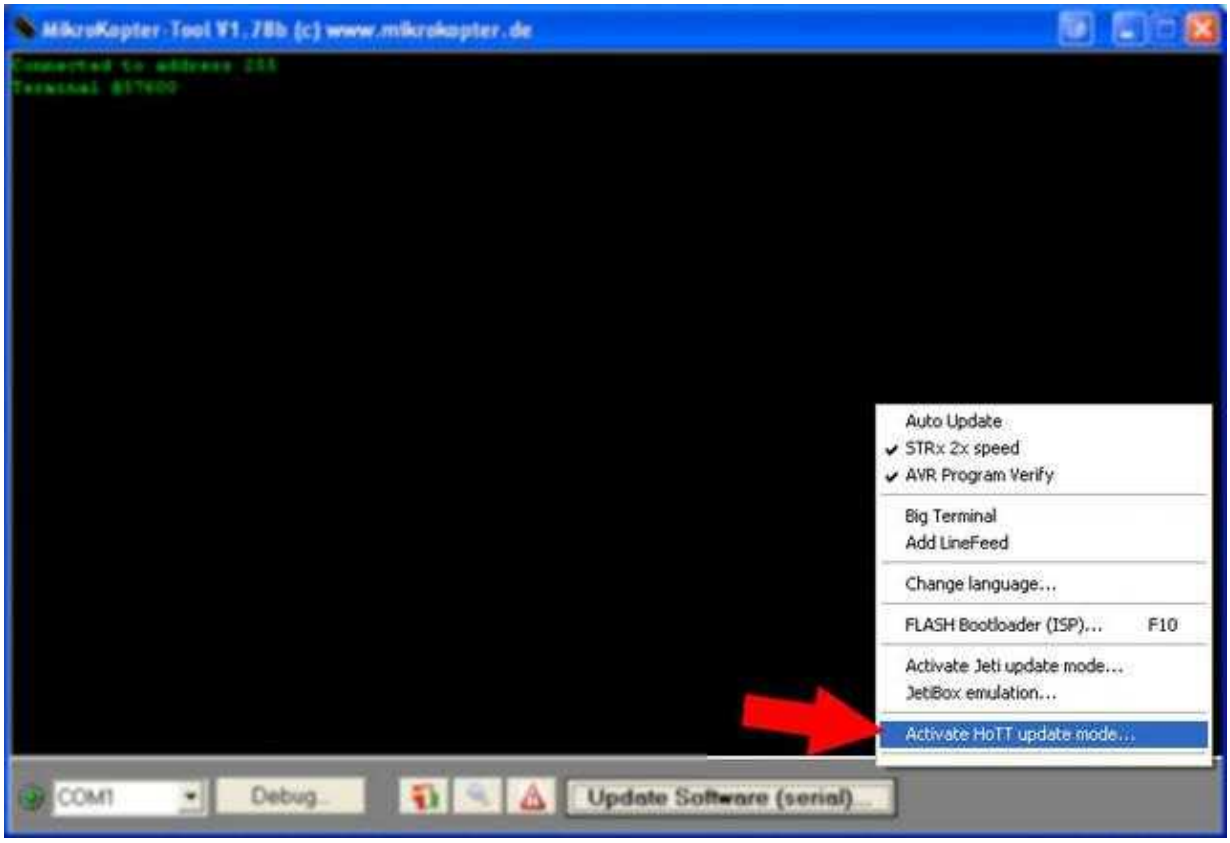
The following requirements must be met:

- The jumper "JET" on the Flight is closed.
- The cable for the telemetry is soldered on the "RX" Pad .
- The FlightCtrl is direct connected with the MK-USB and supplied with voltage.

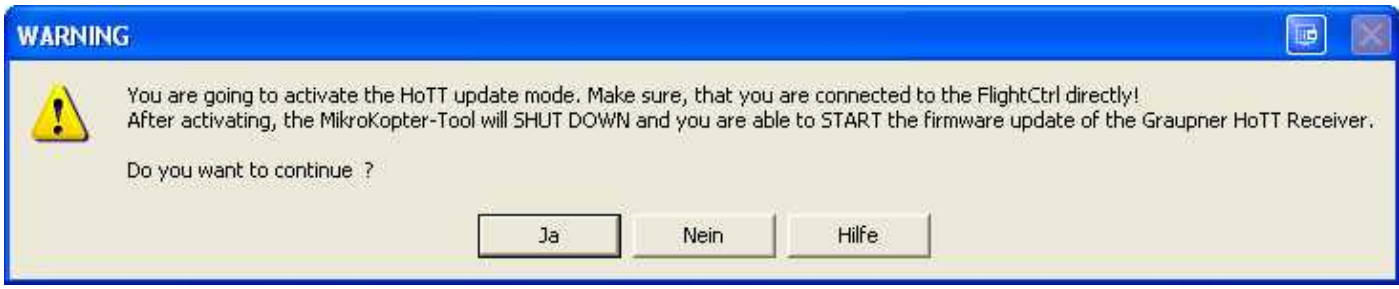
In the KopterTool open via the button **Firmware Update & Terminal...** the terminal window.

- **ATTENTION:** As a receiver type you must have already selected "HoTT" in the Koptertool (menu channels).

In the Terminal window click with the right mouse button on the gray area next to the Update-button. The Kontext-Menu will open. Here you need to select "Activate HoTT update mode..." aus.



After you "clicked" ***Activate HoTT update mode...*** a note window will appear:



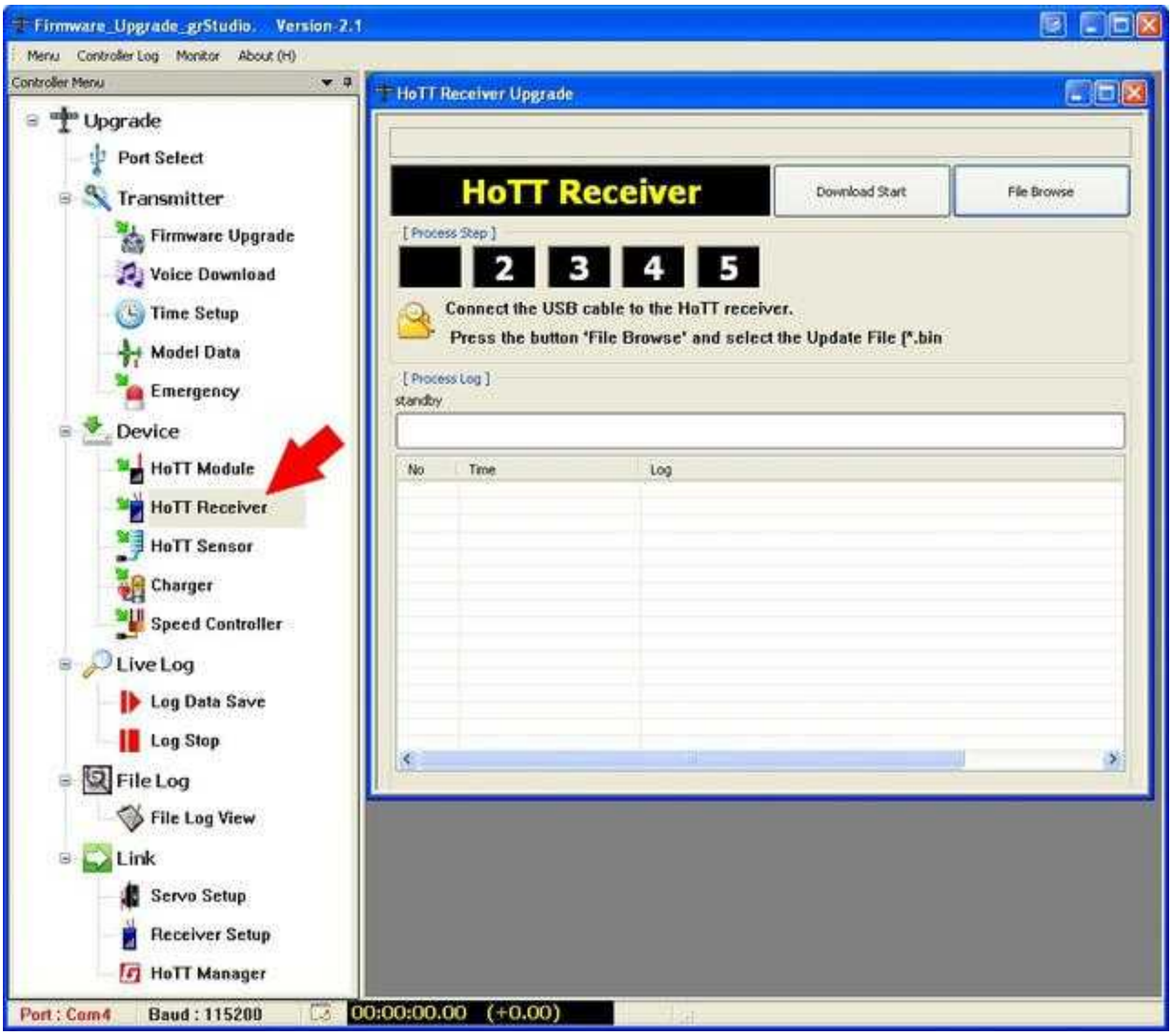
After you confirmed the note window the KopterTool will close and a data channel to the HoTT receiver will open to the same time.

IMPORTANT: At the receiver only the three-wire-PPM cabl will be disconnected (**the one-wire cable has to be connected**).

5.3 Update of the receiver via Graupner Tool

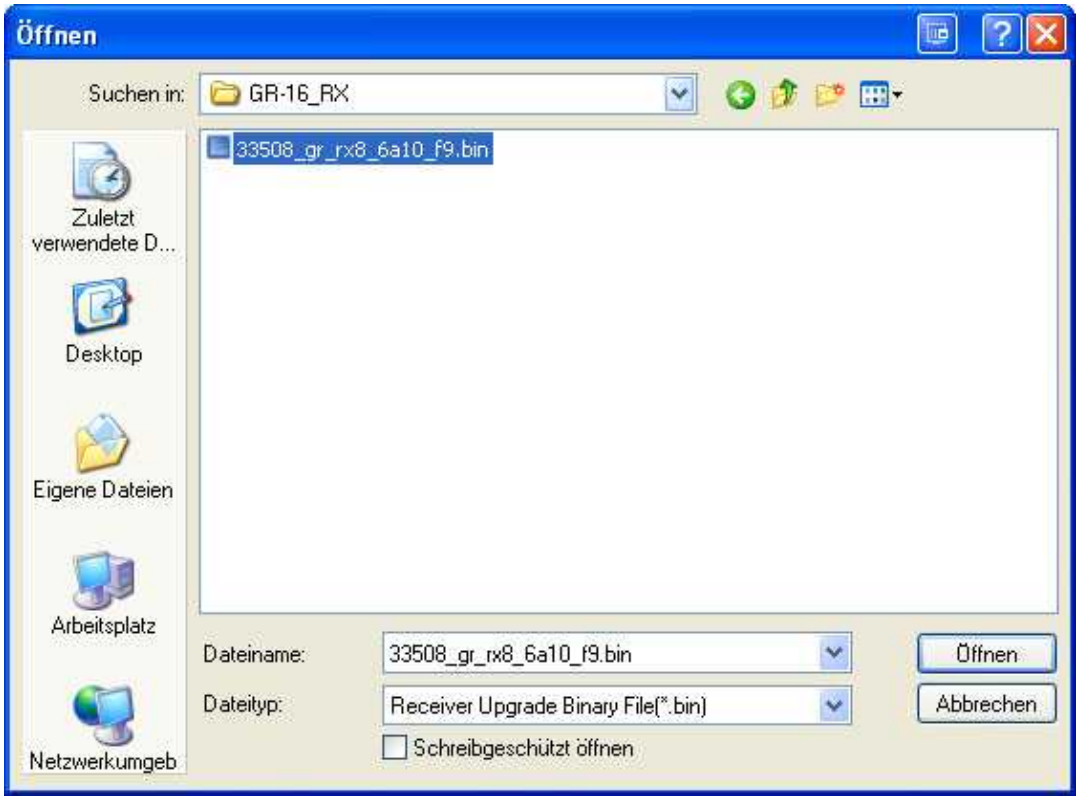
To update now the receiver you can open the program **Firmware_Upgrade_grStudio_Ver-X.X.exe**. You do that as follows:

1. Open program **Firmware_Upgrade_grStudio_Ver-X.X.exe** and select under "Device" the entry **HoTT Receiver**.



2. Via the button **File Browse** you select the appropriate Firmware for the receiver.

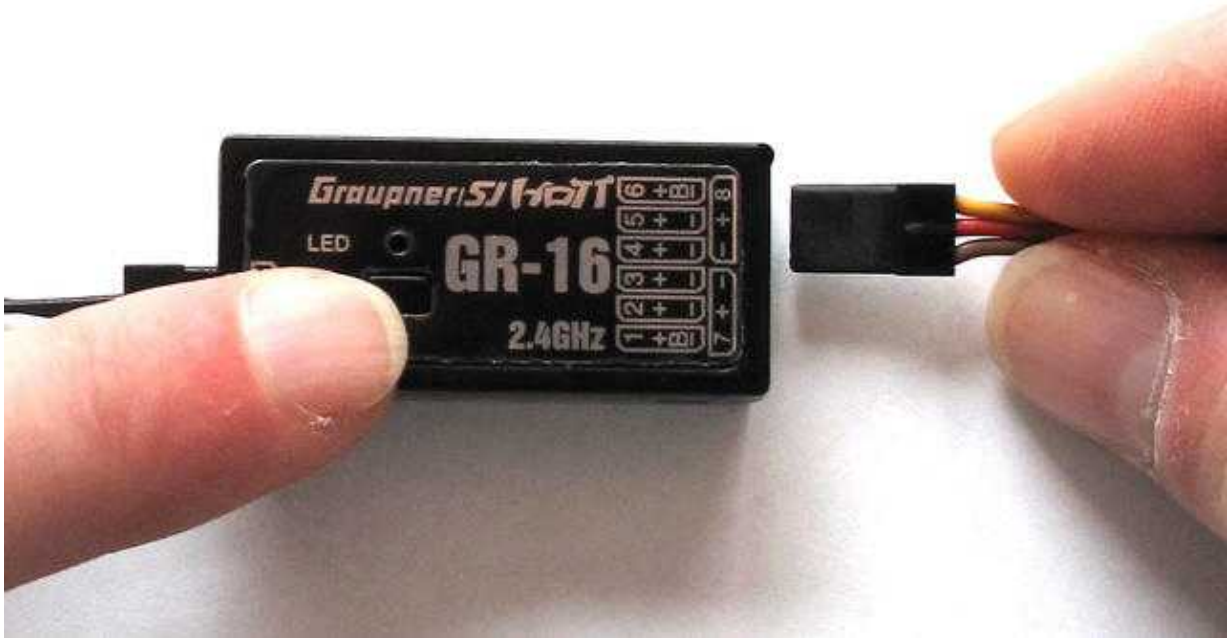
    - For GR-12 i.e. the file **33506_gr_rx6_amp_XaXX_e9.bin**
    - For GR-16 i.e. the file **33508_gr_rx8_XaXX_f9.bin**
    - For GR-24 i.e. the file **33512_gr_rx12_XaXX_bf.bin]]**
    - (XaXX => Version number)



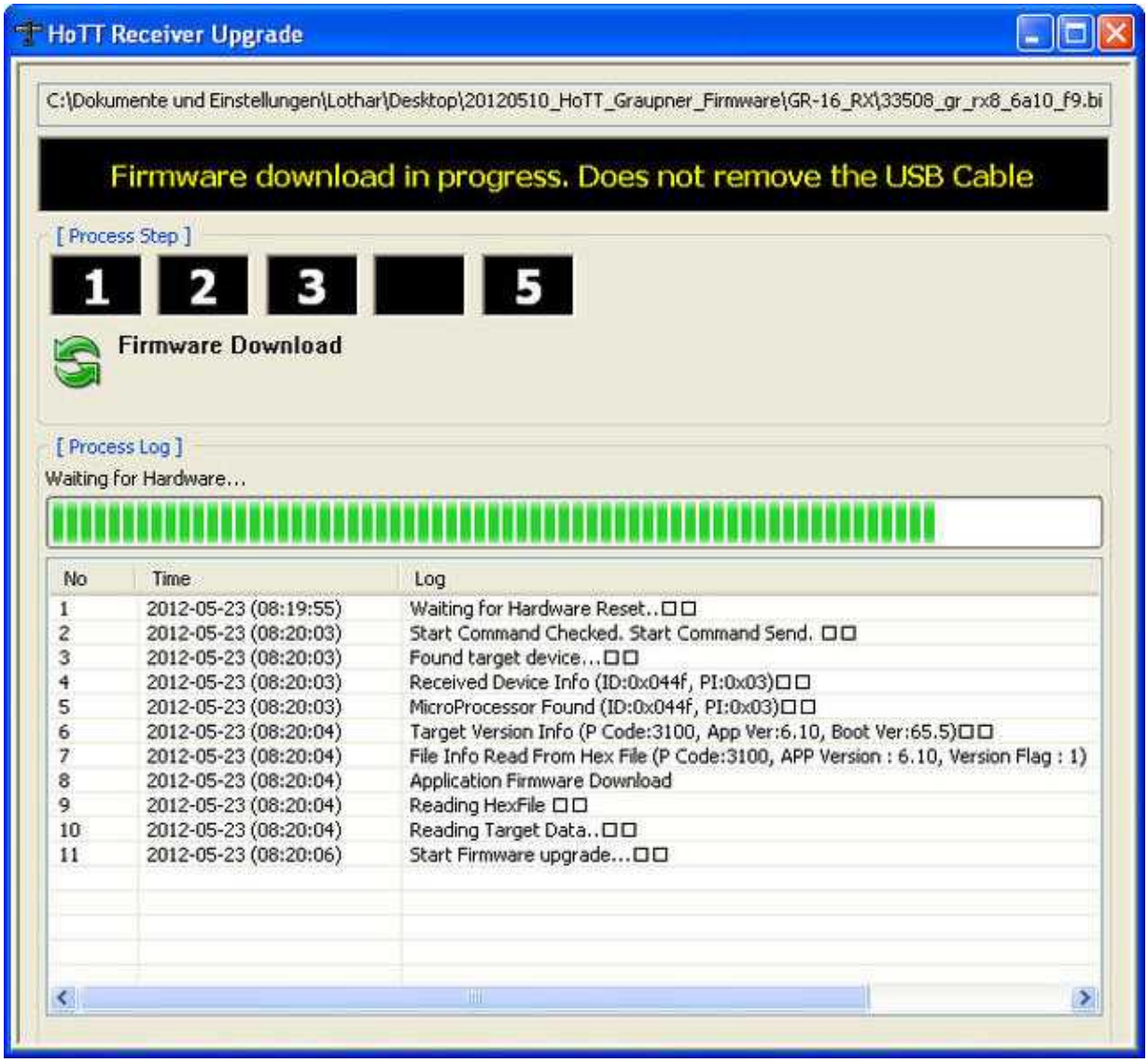
(Example: Software for the receiver GR-16)

3. Now you can start the update via the button **Download Start**.

4. Direct after you have clicked the button **Download Start** you need to press and hold the **SET**-button on the receiver and you connect the PPM-cable also to the same time.



5. If the receiver will be detected the update will start automatically.
   (If it will not work the first time - back to step 3)


HoTT Receiver Upgrade
C:\Dokumente und Einstellungen\Lothar\Desktop\20120510_HoTT_Graupner_Firmware\GR-16_RX\33508_gr_rx8_6a10_f9.bi
Firmware download in progress. Does not remove the USB Cable
[Process Step]
1 2 3 5
Firmware Download
[Process Log]
Waiting for Hardware...
No Time Log
1 2012-05-23 (08:19:55) Waiting for Hardware Reset..□□
2 2012-05-23 (08:20:03) Start Command Checked. Start Command Send. □□
3 2012-05-23 (08:20:03) Found target device...□□
4 2012-05-23 (08:20:03) Received Device Info (ID:0x044f, PI:0x03)□□
5 2012-05-23 (08:20:03) MicroProcessor Found (ID:0x044f, PI:0x03)□□
6 2012-05-23 (08:20:04) Target Version Info (P Code:3100, App Ver:6.10, Boot Ver:65.5)□□
7 2012-05-23 (08:20:04) File Info Read From Hex File (P Code:3100, APP Version : 6.10, Version Flag : 1)
8 2012-05-23 (08:20:04) Application Firmware Download
9 2012-05-23 (08:20:04) Reading HexFile □□
10 2012-05-23 (08:20:04) Reading Target Data..□□
11 2012-05-23 (08:20:06) Start Firmware upgrade...□□

6. After a successful update the following info window appears:

7. **IMPORTANT:** After the receiver has been initialized, as descibed in the info window, the PPM-sum-signal need to be set new via your transmitter.