

HX3.5 Update to Version 5.521

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1. Important

To update the HX3.5 to the new firmware generation 5.5, a Windows 10 PC is required. Please note section **2. Driver Installation** when using older Windows versions.

HX3.5 Editor has been split into 3 separate applications: **HX3.5 Configurator** (former HX3.5 Editor main window), **HX3.5 Panel** (former HX3.5 Editor tab/panel window) and **HX3.5 Updater** (former button in HX3.5 Editor finalize window). These applications will not run in parallel as they use the same MIDI/USB connection.

Due to the extensive structural changes, **existing presets are unfortunately not preserved**. The procedure takes about 25 minutes. Connect your HX3.5 device or HX3.5 motherboard via USB and start the new HX3.5 Updater (version 5.521). Click on **Connect**.

When the connection is established ('MIDI' is highlighted in green), select the desired configuration of your device in the dialog box on the right. Click on the **Update!** Button. A dialog box now reminds you to unplug the MIDI cables. This is absolutely necessary!

The first step is to update the DSP firmware. To do this, the HX3 system is put into DFU transmission mode. Windows requires a driver for DFU communication, which may need to be loaded and installed first (see section **2. Driver Installation** for older Windows systems).

The DREAM Updater for the DSP starts. DSP update is essential for the next update steps in HX3.5 Updater, so make sure the DSP firmware is properly installed. Select the update file, "HX35_5504-FW_0117.dfu" and click on **Update Device**. After the update, terminate the DREAM Updater with **Abort**.

During the update, the automatic procedure is controlled by a script. To protect the update against transmission errors, all data is first loaded into a cache and checked. Only when the integrity is established, data is transferred to the destination.

If a transmission error is reported, restart the HX3 system by momentarily disconnecting the power and repeat the procedure. If errors occur during further attempts, please contact info@keyboardpartner.de. Please specify the device configuration as exactly as possible.

After the update, the 'Board Info' will appear with all new version numbers in the Log Window.

Note for SD card updates: HX3.5 Editor directory will contain several .BAT batch command files to create customized SDCARD folders (in case you want to use the SD card update feature). Just double-click the matching "make_sdcard_xxx.bat" file for your product and copy **content** of SDCARD folder to your SD card root directory.

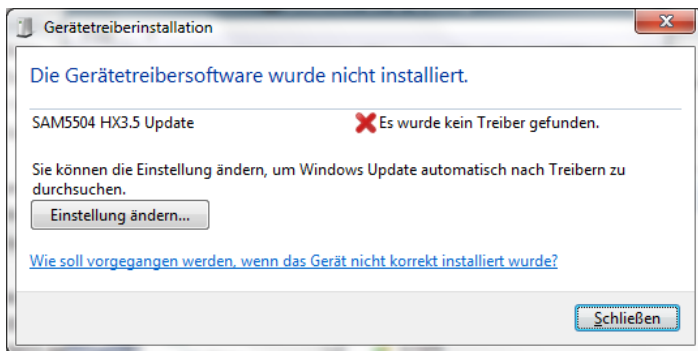
Please also read also the new manual. A lot has changed.

DFU Driver Installation on Windows XP and 7

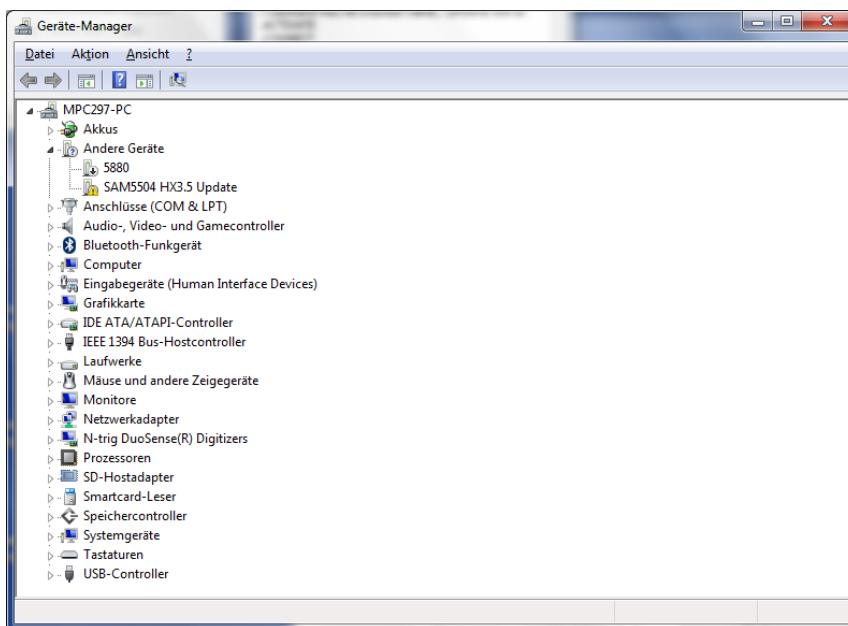
Please download the DFU_driver_XP.ZIP file from our update server (<http://keyboardpartner.remotewebaccess.com/Files/index.php?dir=Current%20Firmware>) and unzip files to your local harddisk.

When the DreamDFU utility is started by the HX3.5 Updater, the DSP update process needs a Windows DFU driver to be installed. On Windows 10 systems it is supplied with Windows, so updating the DSP automatically switches from USB/MIDI to USB/DFU mode.

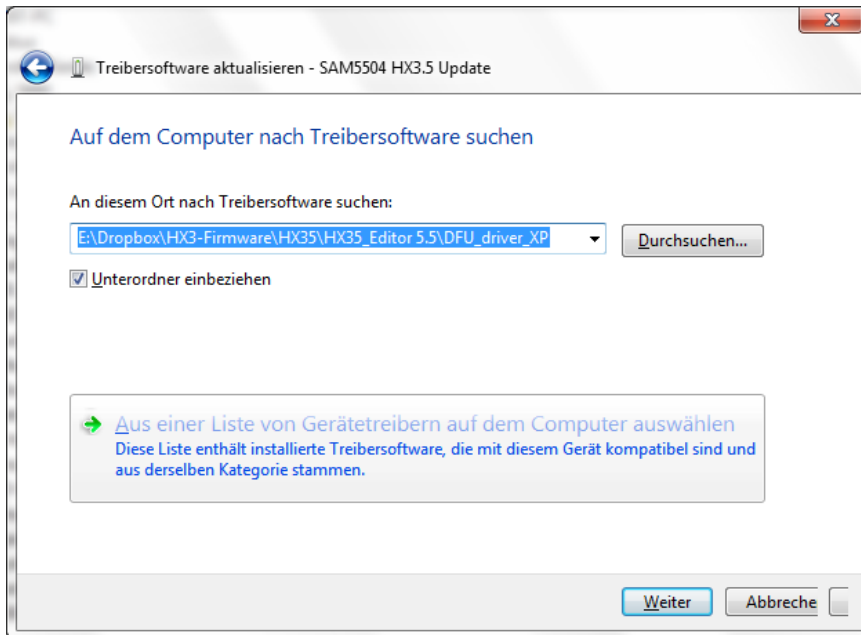
If DreamDFU displays a blue **Searching Device** message, proceed as follows:



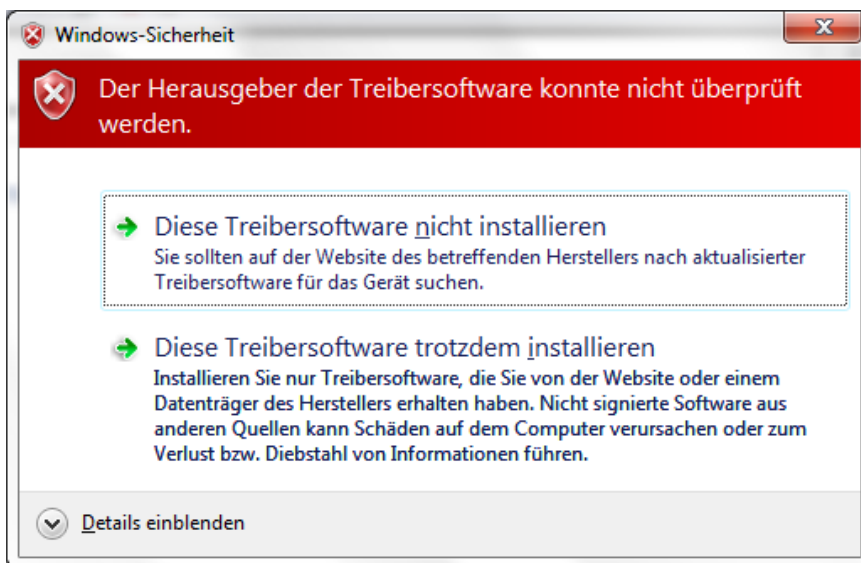
Windows will complain about a missing driver for „SAM5504 HX3.5 Update“. Open Windows Device Manager.



The „SAM5504 HX3.5 Update“ device will be displayed with a yellow exclamation mark. Right-click on this entry and select „Update Device Driver“ (or similar, depends on language version). Let Windows ask for the driver's location, direct it to the „DFU_driver_XP“ folder you just unzipped.



Windows security feature might complain about a non-signed driver. **Choose „Install anyway“ (lower entry).**



After driver installation, an USB controller named „DREAM USB DFU using WinUSB“ device should appear in the device manager's list.

Proceed now with the DSP update by the DreamDFU utility.

3. First Aid in Case of Update Errors

The update process has been redesigned with FW # 5.521, so that erroneous transfers do not lead to a seemingly "dead" device. First, firmware and EEPROM content are transmitted and activated. HX3.5 then automatically launches the new firmware and loads FPGA and scan driver into a shadow memory. The data is only copied to the main memory when file checksums match the stored data.

In the past, disconnections or failures have sometimes resulted in a non-functioning FPGA or scan driver. Then it is no longer possible to communicate with the device via USB, since the communication requires both.

Transmit faults are often caused by werden oft durch eine **poor USB connections** (eg. hubs or insufficient cables) or **ground loops** (desktop PC, mixer, PA). Disconnect all audio cabling on HX3.5 except USB and power supply. „Floating“ analog inputs (unconnected drawbars, pots) may also cause errors. Newest HX3.5 Updater will address this issue by disabling analog inputs temporarily.

In order to bring HX3.5 back to life (prerequisite: at least the welcome message should appear on the display), proceed as follows:

- You need a USB to serial adapter cable (FTDI cable) or a SD card adapter, as offered in our shop. **Plug Jumper J4 CONFDIS** on the HX3.5 mainboard (you can use one of the MIDI Config Jumpers temporarily). HX3.5 should then start with the message "FPGA Fault" on the display.
- Option 1: Create an SD card with the latest updates and start HX3.5 with the inserted card. As soon as the SD card update is complete, remove J4 and restart HX3.5.
- Option 2: Connect HX3.5 to your PC via the USB serial adapter cable (FTDI cable) and start the updater with „Connect via FTDI device“. Perform update. When finished, remove J4 and restart HX3.5.

The Scan Driver may not match your device afterwards, but the device should be accessible via USB-MIDI again. Then, if necessary, the appropriate scan driver can be installed.

If only white boxes appear on the display, you should send in your device to have the firmware reinstalled at no cost.

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