

Hypex Filter Design installation and Hypex FusionAmp Firmware update tutorial



PLEASE NOTE

- The explanations in this manual assume that you have a working knowledge of your Windows® computer.
- For information on your operating system, please refer to your operating system manual or the online Help function.
- The explanations of screens and procedures in this manual are primarily for Windows 10® in Windows environments. The screens may vary depending on the version of the operating system.
- Version numbers in the examples and pictures may vary: Unless specifically mentioned in the text, always check the website for the latest versions.
- This manual is an independent publication and is neither affiliated with, nor authorized, sponsored, or approved by, Microsoft Corporation.

SOFTWARE LICENSE

The SOFTWARE LICENSE acknowledgement will appear when you install the software. By using all or any portion of the software in the machine, you are agreeing to be bound by the terms of the SOFTWARE LICENSE.

BEFORE INSTALLING THE SOFTWARE

- **Description**
Hypex Filter Designer (HFD) is a program to configure Hypex Electronics B.V. DSP modules.
- **Software**
Software and documentation can be found and downloaded at www.hypex.nl.
- **Connecting device**
For connecting and operating your device, consult the specified device manual.

CONTENT

	Page
■ 1. Hypex Filter Design Installation	
1.1 Software download	2
1.2 Software installation	2
■ 2. Hypex FusionAmp Firmware Update	
2.1 Run program	3
2.2 DSP firmware update	4
2.3 Update complete	4
2.4 Troubleshooting	5
■ 3. Fusion OLED Display Firmware Update	
3.1 Run program	6
3.2 Firmware download	6
3.3 Firmware update	6
3.4 Update complete	7
3.5 Troubleshooting	7



Hypex Filter Design installation and Hypex FusionAmp Firmware update tutorial

1. Hypex Filter Design Installation

1.1: Software download

Step 1

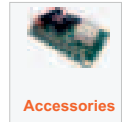
Go to www.hypex.nl and select **Accessories** in the **products** tab.



Application

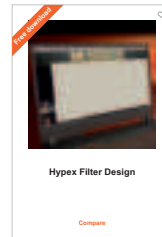
Products

Technology



Step 2

Select Hypex Filter Design.



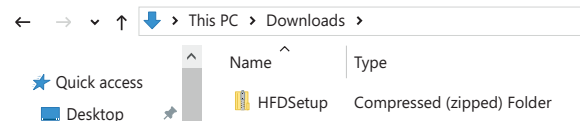
Step 3

Select the **Downloads** tab and find the latest version. Click on the corresponding  button and follow the download instructions from your webbrowser.



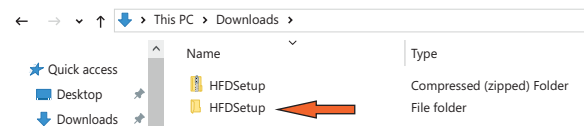
Step 4

Open the download location with Windows File Explorer and locate the compressed HFD file.



Step 5

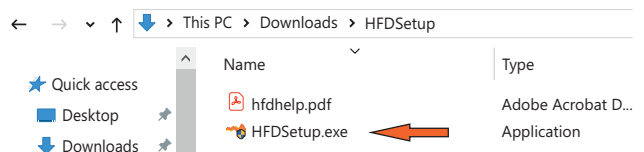
Unpack the file.



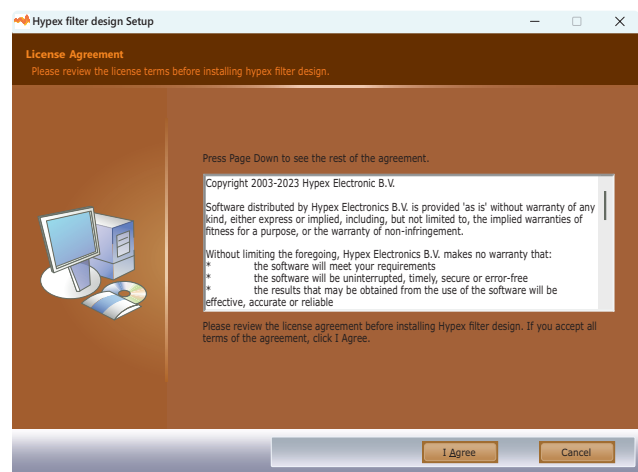
1.2: Software installation

Step 1

Open the unpacked folder and run **Setup**.



Hypex Filter Design Installer will then prompt:

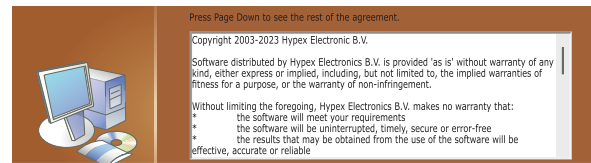


Hypex Filter Design installation and Hypex FusionAmp Firmware update tutorial

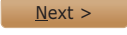
Step 2

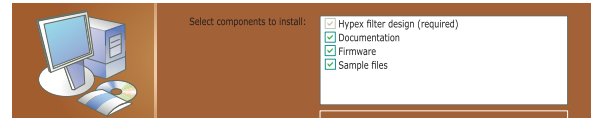
If you accept all terms off the agreement,

press 



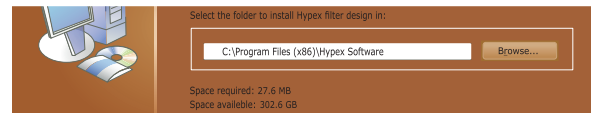
Step 3

Select preferences and press 



Step 4

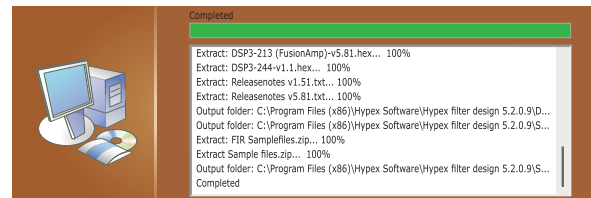
Choose software destination and press  to start the installation process.



Step 5

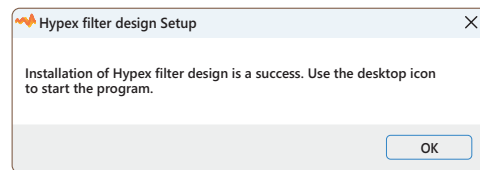
When the installation process is completed,

press 



To close the Confirmation window, press 

Release notes will popup and a new desktop icon is created to start the program.

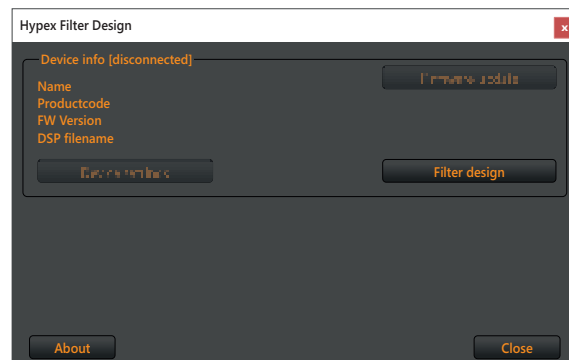


2. Hypex FusionAmp Firmware Update

2.1: Run program and connect FusionAmp

Step 1

Locate HFD or the shortcut and execute HFD.



Step 2

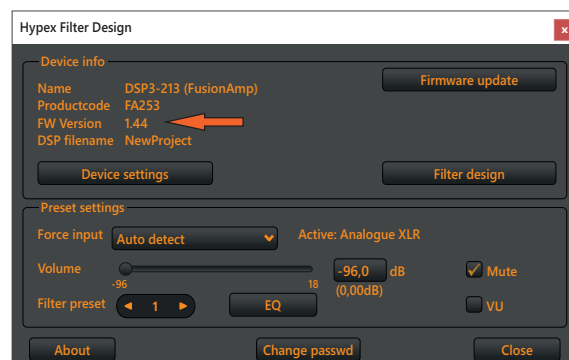
Connect the FusionAmp with USB.



Step 3

Power on the FusionAmp.
HFD automatically detects the device and displays the current firmware version in: 

Depending on this version, you have to determine the right firmware file in the next chapter.

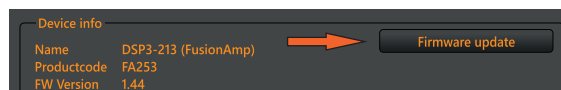


Hypex Filter Design installation and Hypex FusionAmp Firmware update tutorial

2.2: DSP Firmware Update

Step 1

Press 



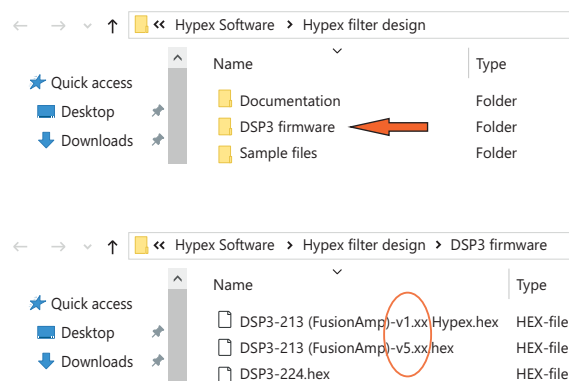
Step 2

The firmware* can be found in the folder:

 DSP3 firmware

- The file named DSP3-213 v1.xx is intended for FusionAmps currently running **v1.3x or v1.4x**.
- The file named DSP3-213 v5.xx can only be installed on FusionAmps currently running **v5.xx**

Select the corresponding file and press **Open**.



*Check our website for the latest version:

Locate your product and select the  **Downloads** tab for additional files.

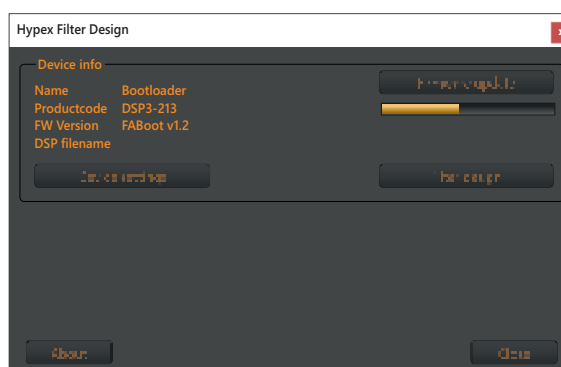
Step 3

HFD automatically updates the firmware on the device.

The lights on the FusionAmp ('Prot' and 'P1') will blink during this process.



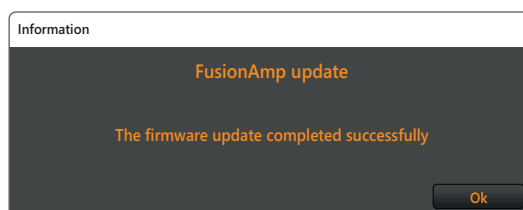
! Don't shut down or disconnect the USB cable.
This could damage the FusionAmp!



Step 4

The DSP automatically reboots when updating is completed.

Press  to finish the process.

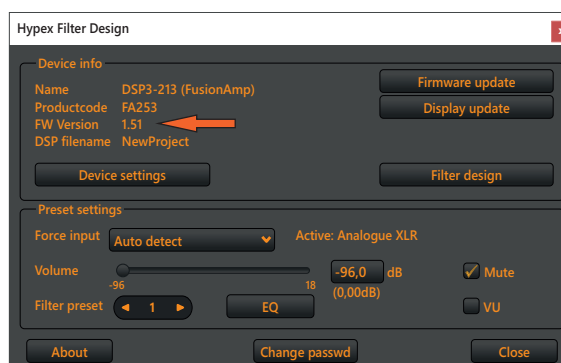


2.3: Update complete

Confirm :

When the update process is successfully executed the new firmware version is shown in HFD.

Restart the FusionAmp (see next page).

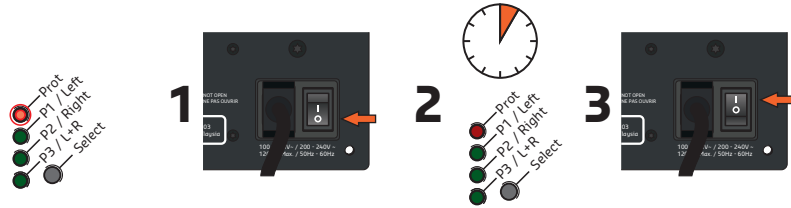


Hypex Filter Design installation and Hypex FusionAmp Firmware update tutorial

Power off/on.

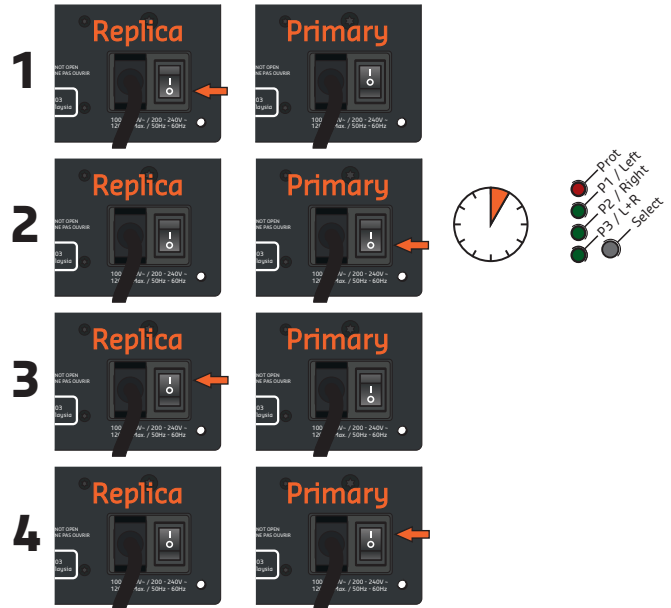
- Option A (Single FusionAmp):

- Step 1
Power down the FusionAmp
- Step 2
Wait until the red light 'Prot' on the FusionAmp is turned off.
- Step 3
Power up the the FusionAmp.

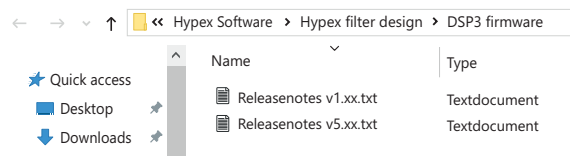


- Option B (Multiple linked FusionAmps):

- Step 1
Power down the Replica.
- Step 2
Power down the Primary and wait until the red light 'Prot' on the FusionAmp is turned off.
- Step 3
Power up the Replica.
(This is necessary for the Primary to be able to detect the Replica and configure its settings).
- Step 4
Power up the Primary.

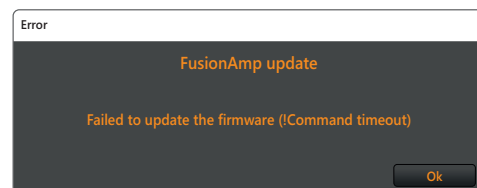


- Release notes can be found in the same folder as the firmware:



2.4: Troubleshooting

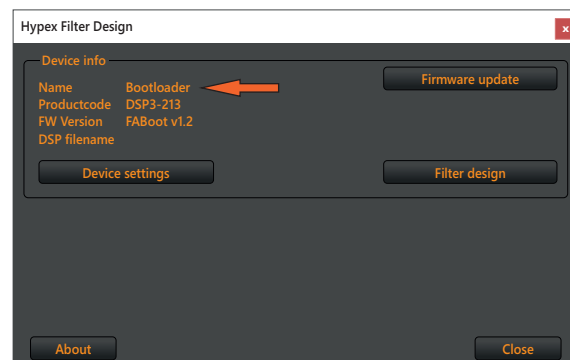
- In case of an error during the update process the next message is displayed:



- When the device name is **Bootloader** after turning on or reconnecting, the same error occurred.

In this case, the FusionAmp is not broken; it will not function, however the firmware can still be re-installed.

- **Execute chapter 2.2 on page 4** in order to (re-)install the firmware to fix it.



Hypex Filter Design installation and Hypex FusionAmp Firmware update tutorial

3. Fusion OLED Display Firmware Update

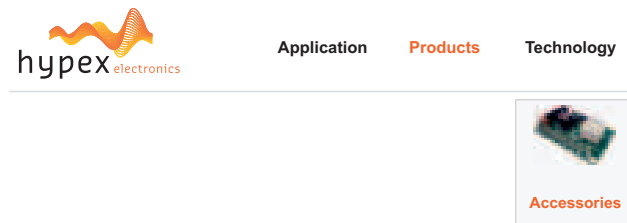
3.1: Run program and connect FusionAmp

■ If the device or software is not ready yet: Follow the instructions in chapter 2.1 and continue with chapter 3.2.

3.2: Firmware download

■ Step 1

Go to www.hypex.nl and select **Accessories** in the **products** tab.



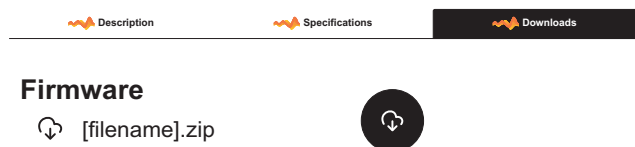
■ Step 2

Select Fusion OLED Display.



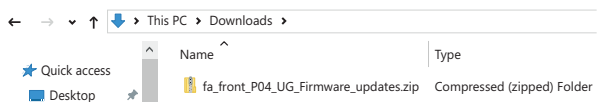
■ Step 3

Select the **Downloads** tab and find the latest version. Click on the corresponding  button and follow the download instructions from your webbrowser.



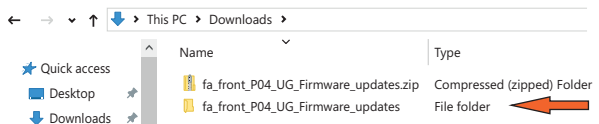
■ Step 4

Open the download location with Windows File Explorer and locate the compressed firmware-file.



■ Step 5

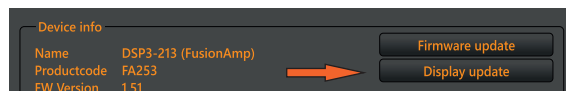
Unpack the file.



3.3: Firmware update

■ Step 1

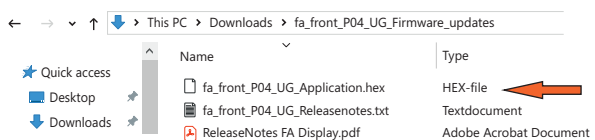
Press 



■ Step 2

After you download the latest firmware from our website, the folder with the display firmware can be found in the folder:  Downloads

Select the HEX file and press .



Note: Release notes can be found in the same folder.

Hypex Filter Design installation and Hypex FusionAmp Firmware update tutorial

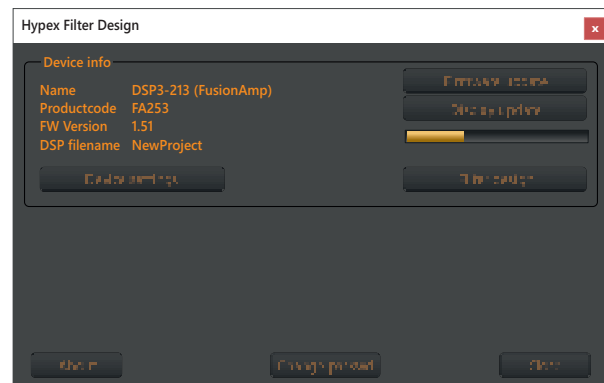
Step 3

HFD automatically updates the firmware on the display.

The status is shown in HFD and the display will switch to bootloader status. A lot of data is being transferred so there is nothing wrong if this process will take a while...

```
UI BTL v1.1  FA A
EEP          3624
VER
```

! Power and connections must be maintained during the upload process until the next step.

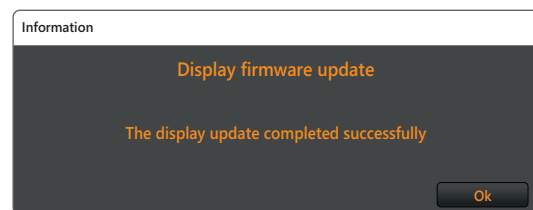


Step 4

A popup window will confirm a successful update.

The display will show the word **PASS**.

```
UI BTL v1.1  FA A
VER 35508  PASS
```

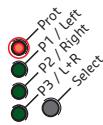


Press **Ok** to finish the process.

3.4: Update complete

Step 1

Power down the FusionAmp and wait until the red light 'Prot' on the FusionAmp is turned off.



Step 2

Wait at least 5 seconds.

Step 3

Power up the the FusionAmp.



3.5: Troubleshooting

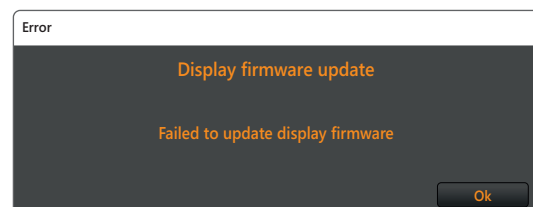
The next message is displayed in HFD in case of an error during the update process.

The OLED display will freeze at the line it was processing:

```
UI BTL v1.1  FA A
EEP          4918
VER
```

If this error occurred before re-starting the device, HFD will not show a warning but the IR-receiver is unresponsive and the display is still showing bootloader-mode.

```
UI BTL v1.1  FA E
```



In both cases:

- Execute the update-process starting at chapter 3.3 and the display will function normally again after a successful update.