DDMF Superplugin Manual

Version 1.2.0

Thank you for using DDMF's Superplugin! The following should help you to get the most out of this audio plugin. If, after reading, you still have questions about the usage of this software, don't hesitate to contact support@ddmf.eu !

Setup:

Superplugin comes as a (Windows or Mac) installer package. The available plugin formats are VST, VST3, AU (Mac only) and AAX. You can choose which of these formats you want to have installed. On Windows you can also choose the VST folder where you want the 32 and 64 bit VST versions to be copied to. After installation your host should recognize Superplugin, as well as SuperpluginSynth, the instrument version of Superplugin. If not, you might have to perform a manual rescan of your plugin folder. Please refer to your host's operation manual on how to do this.

Apart from the plugins, SuperpluginSynth also comes as a standalone version. It will be installed in your applications folder by default.

Registration:

When you are using the full version for the first time, a message will appear that will complain about a missing license file. Please obtain your license file from https://ddmf.eu/login , unzip it so you have a .txt file, then click on that message in the

plugin user interface. A file browser will open; use it to select your license .txt file. That should be all! Please note that you do need to install the full version, there is no way to activate the demo version.

Usage:

Superplugin is essentially a plugin-chainer with a predefined layout. If you look at the UI above, let's quickly walk through the signal chain:

- from the top left, you see the "IN" rectangle followed by four possible plugin slots arranged serially.

- the output of that first serial chain then enters a 4 band frequency splitter ("X-Over"). You can select the three frequencies that separate the first bands with the top three knobs, and subsequently adjust the level of each of the four band with the lower four knobs.

- The four bands are then fed into a 4x4 matrix, each band with its own chain of 4 plugins arranged serially again. Here you can apply various effects to your different frequency bands.

- After the crossover section, the four bands are summed, and enter a final chain of 4 serially arranged plugins before your audio signal finally leaves Superplugin and is handed back to the host.

How to load plugins into Superplugin:

There are two ways to load a plugin into one of the plugin slots: you can either use the plugin library on the left (simply click on any of the plugins in the library and drag it onto the desired slot), or you can double-click on a slot and use the file browser that will open to select your desired plugin directly from your hard disk. If you want to use the file browser, you will first have to load the library with at least some plugins. In order to do this, please use the "Options" button and scan for plugins in the desired format. The following plugin formats are available:

- VST, VST3 and AU plugins: those are standard plugin formats of which you will probably have a selection already installed on your computer. AU plugins is a Mac-only format, while the other two formats are available on Mac and PC. The VST (a.k.a. VST2) format is slowly being faded out and replaced by the VST3 standard, but Superplugin still supports both versions of the VST standard.

- Bridged VST/Bridged VST3/Bridged AU: if you are on a 64 bit system that can still run 32 bit processes, you have the option to use 32 bit plugins in a 64 bit host via Superplugin. The bridged plugin will then run in a separate background process. This way, older plugins for which no 64 bit version is availabe can still be used. Please note that for OSX 10.15 (Catalina) and higher, it is no longer possible to run 32 bit processes at all, so there is no option to load bridged plugins.

- Bridged Intel VST/VST3/AU plugins: the latest generation of Apple computers is running on "Apple Silicon" chips which use a different architecture compared to the Intel chips that were used before. Currently, there are still a lot of plugins that have not been ported to the new binary format and are only available in Intel format. This is no problem if the DAW you want to use is also available as an Intel version, as Apple has provided a translation unit running in the background ("Rosetta2") which will allow you to run your DAW as an Intel process and then load Intel plugins into it. However, if your DAW is running as an Apple Silicon process, you can no longer load Intel plugins into it directly. This is where Superplugin can help you on those newer apps: it provides a bridged between the Apple Silicon and the Intel world, running Intel plugins in a background process that will make them appear as native Silicon plugins in your DAW of choice.

Please note that, while Superplugin is of course availabe as an AAX plugin for usage in ProTools, for legal reasons it is not possible to make it an AAX host. This means you cannot load AAX plugins into Superplugin.

How plugins are connected:

When you load a plugin into any slot, its in- and outputs are automatically connected according to the layout of the chain. Superplugin will only use the first two audio channels that are being presented by the plugin. If the plugin is a mono plugin (only one channel) and the plugin before or after it has two or more channels, Superplugin will connect the first two channels of that other plugin to your mono channel (summing). Superplugin will ignore any channels beyond the first two channels, i.e. it handles mono or stereo plugins, but if you want to realize more complex routings with plugins that offer more channels (sidechain, 5.1. and the like) you will need to resort to Metaplugin instead.

With regards to MIDI in- and outputs, all plugins that allow MIDI input will be connected to the selected MIDI source of Superplugin. The exception is when you insert a plugin that outputs MIDI (e.g. a MIDI effect) right before a plugin that accepts MIDI, in which case the second plugin will receive its MIDI signal from the previous plugin.

Bypassing the crossover section:

If you do not want to split your signal using the 4 band splitter, the "Bypass" button in the upper right corner of the crossover section can be used. In bypass mode, the splitter is deactivated, but the signal will still be fed directly to the four parallel chains of the 4x4 matrix. The level of each of the four parallel bands will be multiplied by 0.25 when the crossover filter is bypassed to be sure to obtain a flat summing filter without any plugins loaded into the matrix.

Removing a plugin:

Each slot has an "X" button in its upper right corner. Click on it, and the loaded plugin (if there is any) will be removed from the slot.

Bypassing a plugin

In the lower right corner of any plugin slot you'll find a button labelled with a "B". This button will let you bypass the plugin loaded into that slot.

Moving/copying of a plugin:

You can move any plugin that is already loaded into a slot to any other slot by simply dragging it from one slot to another. The current settings of that plugin will be kept. If you want to duplicate a plugin (i.e. the plugin should appear in both the old and the new slot), hold the "Ctrl" button before dropping the plugin to the new slot.

Accessing plugin parameters

Superplugin exposes 100 parameters to the host. These parameters can be mapped onto the parameters of loaded plugins using the three parameter mapping drop-down menus in the top row, or by simply clicking the ""Learn" button and moving the controls for the parameters you want to map (just don't forget to unset "Learn" mode afterwards again).

To set a parameter map manually, for instance, if you have loaded an effect called SuperEQ which has an internal parameter called HighGain and you want to map that onto parameter1 of Superplugin, simply set the left drop-down menu to parameter1, the middle one to SuperEQ and the right one to HighGain. Now, when you automate parameter1 in your host program you will actually automate the HighGain parameter of SuperEQ...

Oversampling

Superplugin can operate the whole plugin chain in realtime mode with up to 16x oversampling, and in offline mode (during rendering) even with up to 64x oversampling. The process of oversampling consists of increasing the sample rate in order to avoid possible artefacts when, e.g., harmonics are being generated that are higher than the maximum frequency that is supported by the current sample rate and will therefore fold back into the usable spectrum, creating unpleasant results (look up “aliasing” if you want to know more about this).

Select your desired oversampling factor from the dropdown menu (OS: off is the default, no-oversampling state). You can select the filter that is being used by the oversampling algorithm, using the “IIR/FIR” button right next to both the realtime and the offline oversampling dropdown menu. “IIR” uses a minimum phase filter, with very small latency but a noticeable phase change at Nyquist frequency. “FIR” causes a slightly higher delay, but comes with linear phase response.

CAUTION: 8x oversampling or higher is quite a mouthful for most plugins, especially if you are already operating at a base sample frequency higher than 44.1 kHz. It is absolutely possible to experience audio dropouts, stuttering or even crashes when operating a plugin outside of its designated frequency range. And although you might think that “anything

goes” in offline rendering, it could still be the case that a plugin's internal algorithm is not built to handle frequencies in the MHz range. Don't blame it on Superplugin, and take it down a notch, 4x oversampling is usually sufficient to hear a noticeable improvement in nonlinear plugins.

A/B option

Superplugin has two internal states, the “A” state being active by default. In the usual fashion, you can work on two different chains to make direct comparisons between differing setups. Click on “A” or “B” to switch to the respective state, and click on the “<-->” button between the “A” and “B” button to copy the state from the currently active to the currently inactive states.

User presets

Apart from the plugin library, there is a second tab on the left named "User presets". Here you can easily store your own configurations that you want to use repeatedly. Simply click the "Save current state" button to store your current chain of plugins, give the preset a name, that's it.

Select any preset in the list by simply clicking on it. Right-clicking on an already existing preset lets you rename it, resave it (if you have changed something) or delete it from the list. Also, you can assign it to one of the available categories. For this, you first have to create at least one category (e.g. “My bass presets”). You can add categories to your preset list by clicking the “New category” button. Once categories are present and filled with at least one preset, you can browse them in a folder-like structure. Categories with zero presets in them will no longer be shown when reloading your preset list upon the next loading of Superplugin.

Demo restrictions

If you use the demo version of Superplugin, the settings will not be saved when saving a project/song. In addition, in the standalone version of SuperpluginSynth, a second of random noise is added once every minute. Apart from that there are no other restrictions so you can fully explore the possibilities it offers to you.

Questions/feedback: support@ddmf.eu