



Virtual Mix Rack 1.0



Slate Digital Virtual Mix Rack

Version 1.0

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Introduction

By Steven Slate

It's brings me such joy to introduce you to the Virtual Mix Rack. This is a processor that everyone at Slate is so proud of, and I hope that once you put it into use on your mixes, you'll understand why.

The concept of the Virtual Mix Rack actually started years ago when I began to record my first drum samples. I had a rack of gear all wired into each other that would process my drum mics. What I found was that I always loved combining different gear because I preferred to blend the best parts of each one. For instance, I remember for a particular snare sample, I used the top end of a famous tube EQ, then used the midrange of a US EQ to add punch, then some low end shelf from a classic British EQ, and then finalized it with a touch of compression from a VCA compressor. I found it so convenient to have all the processors in one rack.

Years later I saw something similar at NRG Recording Studios as I watched my good friend, Grammy award winning producer/mixer Jay Baumgardner, do a mix. I noticed on several tracks he had combined multiple pieces of gear to craft the final sound. On one vocal track, he had the top end of a famous tube EQ, the midrange and lows of a British console EQ, and then two different compressors combined all in a hybrid manner. I found it really clever how he used all the unique aspects of each processor.

In the analog world, the need for multiple processors in one easy to use rack became extremely popular with the now industry standard 500 series. When I started using 500 series racks, I was delighted to be able to get my processing done so much more fast and efficiently. I knew that if we could recreate this in plugin form with precise analog modeling, we'd have a hit. So in 2012, I drew a picture on a piece of paper and showed it to Fabrice. "I love it. Let's do it", he said.

Little did I know what a complex world we'd be getting into. The Rack structure itself is a work of art, with the Slate Digital development team doing a fantastic job on creating a rack that has innovative concepts in its workflow. The graphical elements and ability to arrange the processors uniquely to the engineer's demands is fantastic. The rack works exactly as you'd want it to, and it provides the exact same creativity as the analog version does, but with even more versatility.

And then there is the analog modeling. All I can say is that these five processors have been the most challenging in our history, with special attention to the FG-116 which models the classic American FET compressor. In case, you're unaware of how we model analog processors, it starts with an examination of the schematic and then leads to an extensive testing of the actual gear, which then leads to initial algorithm modules created by Fabrice and the DSP team. These complex modules represent all the aspects of the gear. For instance, a transformer can have

several modules that correspond to how this component affects the sound of the audio. It is then up to me to tweak these modules, and send notes back to Fabrice and the DSP team if there are changes that need to be made. This back and forth process can happen many dozens of times.

Because of the complexity of the FG-116, where every parameter affects all other parameters (such as how the gain reduction affects timing, output level affects transformer response), it becomes extremely difficult to match the analog gear. Often I'd be able to match one piece of reference material exactly, but then the same setting would sound incorrect on another reference piece of material. It was really frustrating. But with perseverance (and a lot of coffee), the team came through and were able to recreate the sound with such precision that a room full of pro audio engineers was unable to hear the difference in a blind A/B test. That was a fun day for sure.

The EQs are absolutely stunning. I can't find anything that the FG-N British EQ does not sound good on. It's so musical and fat, and is a staple in my mixing. For special effects, it's fun to crank the line input while on drive mode and to slam all the bands into a distortion. The FG-S is a musical craftsman. I love doing precise cuts with it, especially with its famous hi pass filter which has the magical ability to not make the frequencies above its cutoff point sound awkward like some other hi pass filters do. When you make the bandwidth wide, it can be really punchy on drums and transparently enhance a vocal after slamming it with some compression.

The FG-401 is a compressor that is made to be a swiss army knife for mixing. Circuit 1 is your classic grabby VCA style compression, and is perfect for modern music of all kinds. Circuit 2 has a different circuit path and timing characteristic that is smoother and more transparent. You can slam stuff on circuit 2 without making it sound too squashed. It's amazing on bass, vocals, and is my go to for drum overheads. The transformer on the 401 is inspired by several designs, but I customized it by ear and it adds some beautiful depth and harmonic spark to liven up the source track.

In conclusion, the Virtual Mix Rack has revolutionized the way I mix in the box. Combined with our other analog modeled processors, I'm getting the best sounding mixes of my life and having more fun. I hope you find the same enjoyment. Happy mixing.

System Overview

Modular System

Slate Digital VMR System is a modular architecture that allows the use of processing units, the Modules, within a Rack Platform, the Virtual Mix Rack Plugin.

In the VMR System Architecture, the Rack and the Modules are independent. They both reside on the system as two separate binary sets. This offers a more flexible way of adding new modules in the Virtual Mix Rack ecosystem, without having to systematically update the entire set of existing modules. This separation also allows an easier and more powerful way to deal with iLok licenses. Each Module is associated to its own license, some of them are gathered into Bundles, some others are using the same license as the Virtual Mix Rack Plugin itself, etc.

System Components

The VMR Platform is made of two components :

1. The Virtual Mix Rack Plugin
2. The Virtual Mix Rack Modules

VMR Plugin

The Virtual Mix Rack Plugin is the corner stone of the VMR System. It is the actual plugin you insert in the host. Within this plugin, you can load, use, move and remove Modules.

VMR Modules

VMR Modules are just like small plugins. In fact, they are plugins, except that they are living in a plugin format that only the VMR Rack can interpret and use.

From the VMR System perspective, the Virtual Mix Rack Plugin is the host, and the VMR Modules are the modular processing units.

Modules can be of any kind : dynamic processing, EQs, delays/reverbs, mixing utilities, mastering units, metering, etc.

Requirements

Supported Architectures

Windows

- Windows Vista, 7, 8, 8.1 or higher, 32 and 64-bit
- Plugin Formats : VST2, VST3, AAX (32 and 64-bit), RTAS (32-bit only)

Mac

- Intel Processor
- Mac OS X 10.7 or higher
- Plugin Formats : VST2, VST3, AudioUnit, AAX (32 and 64-bit), RTAS (32-bit only)

Rack and Module Licenses

Due to the Modular architecture of the Virtual Mix Rack Plugin, you will need multiple licenses to get your VMR System up and running :

- The VMR Rack License itself: activates the Rack and the free Modules (Revival, etc.)
- Modules/Modules Bundles Licenses : for instance, the Mix-Bundle License Bundle contains licenses for FG-116, FG-401, FG-N and FG-S. Those four licenses are included in the Mix-Bundle and cannot be separated.

See the *ilok Protection* section for more information.

Rack and Module Versions

There is an important thing to know about the VMR System : a Module under version *X* will only work within a Rack that is also under version *X*, and vice-versa.

It means that if you install a Module or a Bundle with version 3.2, then you will need to update both your VMR Rack Plugin and all the VMR Modules you have on your system to version 3.2 in order to get everyone working together. You can have a quick look to all your components version in the About Panel (see *About Panel* section).

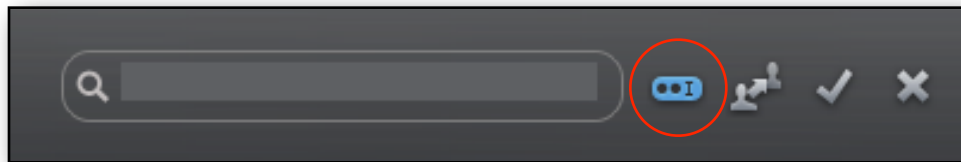
Installation

Redeeming Your iLok License

Before downloading the iLok License for Virtual Mix Rack or any Module or Bundle of Modules, you will need to install the latest iLok License Manager. You can download the latest installers [here](#).

In order to download your iLok license to your iLok 2 dongle, please visit the link that was given to you in your email receipt and enter the required info including the issued passcode. This will unlock your iLok Activation Code.

1. Launch the iLok License Manager and sign in to your iLok account.



2. Click this button in the upper right corner of the window
3. Enter your Activation Code and click “Next”
4. Select your iLok 2 Dongle from the **Activation Location** dialog and click “Activate”
5. You'll receive a confirmation message when the license is moved to your iLok 2 Dongle.

Installing Virtual Mix Rack

Mac

Double-Click on the installer icon and follow the on-screen prompts. You may choose to customize your installation by clicking the “Customize” button to select in particular :

- Module Presets you want to install
- VMR Modules/Modules Bundles you want to install
- VMR Plugin Formats you want to install

Windows

Double-Click on the installer icon and follow the on-screen prompts. You may choose to customize your installation in “Select Components” rubric. Choose the desired plug-in directory paths (those default are usually noted best), and proceed.

VMR Overview



The VMR Plugin is divided into three areas :

- On Top, the **Preset Bar**, which allow you to manage Rack Presets, access to the About Panel and other additional settings
- On the Left, the **Library**, where you find all your available Modules
- At the Center, the **Slots**, where you add and use actual Modules

Slots and modules

There is an important difference between the Virtual Mix Rack **Slots** and **Modules**.



Slots

- The VMR Plugin can host up to eight Slots
- Slots are empty VMR spaces that load Modules
- Host Automation is written to Slot Parameters, not to Module Parameters (see *Using the Modules*). Slots Parameters belong to the Rack and they are the ones that are declared to your Plugin Host.
- Each Slot has its own header with utility and preset functions (see *Using the Modules*).
- Slots can be empty, in which case, a blank metal plate covers it, preventing it from virtual dust.

Modules

- Modules are audio processing units that are loaded into an empty Slot.
- Module Parameters are automatically mapped to Slot Parameters.
- Module Parameters are automateable only via Slot Parameters.

Library

Interacting with Modules

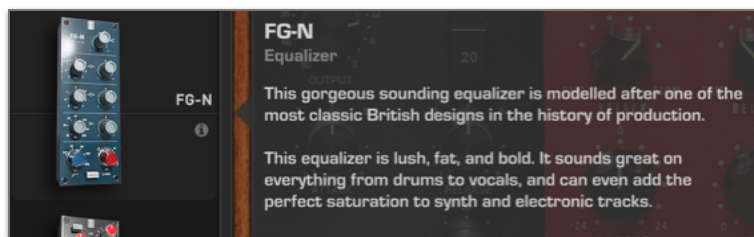


The Library displays all the Modules that are installed on your system, and provides you some information about them. The Library Filter feature also allows to filter the Modules depending on their processing category.

The Library is a good place to get quick information about a Module, such as :

- Module Status : has a license been found for this Module ?
- Module Category : Dynamics, EQ, Harmonics, etc.
- Quick description for each Module

The small Info icon below each Module name in the Library indicates the module status. Clicking on this icon will display a small popup that unveils more info.



Using Category Filters

You can use Category Filters to quickly search the VMR Module Library.

Clicking on a filter will enable or disable it.

Clicking on a filter while holding the Cmd/Ctrl key will add it to the current filtering group, allowing you to create more complex filters.



Handling the Modules

Adding Modules

There are two ways of adding Modules :

1. By double clicking on the Module's Thumbnail in the Library
2. By Dragging the Module's Thumbnail from the Library and dropping it into a Rack Slot

Moving Modules

To Move a Module, grab it by its panel and start moving it around. The Rack processing sequence is updated during the drag operation, both visually and sonically (the audio path follows what's happening visually in real-time).



Duplicating Modules

To duplicate a Module, Drag'n Drop it while holding the Opt/Alt key. More generally, as long as the Opt/Alt key is pressed during a Drag'n Drop operation, then the dragged Module will be a clone of the original one.

Removing Modules

There are two ways of removing Modules and Slots :

1. By clicking on the X icon in the Slot Header : this will remove the entire Slot, with the Module that is inside (note : the Rack will always have a minimum number of visible Slots, so when removing a Module, you can potentially end up with an empty Slot)
2. By dragging the Slot and dropping it outside of the Rack. Then the Slot is displaying a trash icon, as shown below :



Moving/Cloning Modules between Rack Instances

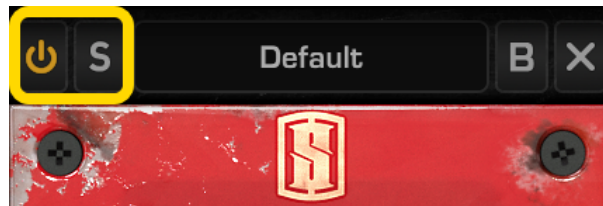
This is one of the nice feature of the VMR from a workflow perspective : you can add, move and duplicate Modules between two Rack Instances.

To Move/Clone a Module from an instance to another, just drag the Module from the first Rack view to the second. Holding Opt/Alt during the Drag operation will duplicate the Module instead of moving it.

This also works with the Library, you can grab a Module from any Rack instance's Library, and drop into any other Rack instance's Slot.

Using the Modules

Power and Solo Modes



Each Slot processing can be bypassed and soloed.

To bypass a Slot, press the yellow Power Button in the left of the Slot Header.

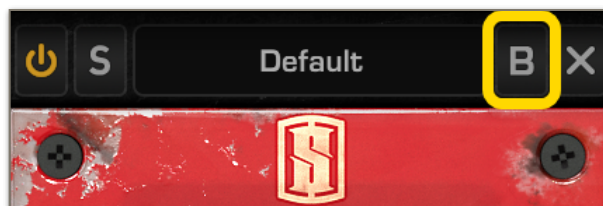
To Solo a Slot, press the “S” Button. Slot Solo has two modes of operations :

1. Simple Click on a Solo Button : this will Solo this Slot and this Slot only (the XOR Mode).
2. Cmd/Ctrl+Click on a Solo Button : this will add/remove this Slot in the current solo group (the Group Mode).

Module Preset System

Each Slot embeds a light preset system which allows you to Save, Load and Delete presets for individual Modules (see *Preset System* section).

Automation Panel



For an easier handling of Automation, the Virtual Mix Rack has a special panel, dedicated to Automation Display. You can access this panel by clicking on the Slot Letter in each Slot Header.



This panel displays a list of all the Automation Mappings, for all the currently loaded Modules. In the “Automation Name” column, you can read the names of the parameters as they will be seen by the Host. In the “Parameter” column, you can read the names of the Module Parameters. Depending on the plugin format your Rack is running, the Automation Names that are exposed to the Host by the Rack can be generic (like “H-10”), or they can be dynamically changed (like “H-Drive”).

Click anywhere outside the panel to dismiss it.

Key Commands

On any Module Control (*Knob, Switch etc.*) :

- Opt (*Mac*) / Alt (*Windows*) + Click resets the parameter to its default value
- Double-Click resets the parameter to its default value
- Cmd (*Mac*) / Ctrl (*Windows*) + Drag enters fine edition mode

Preset System

VMR Preset System

The Preset System allows you to fasten your workflow by using predefined configuration. If you consider the VMR System not just as a channel-strip, but as a complete Processing ToolBox, then Presets could easily become the starting point of any of your Virtual Mix Rack Plugin instance usage.

Presets are divided in two Layers :

1. **Rack Presets** : handled through the top Preset Bar
2. **Module Presets** : handled through the Preset Label within each Slot

Rack and Module Preset Systems are independent. A Rack Preset contains all the Slots and Modules configuration, but it doesn't store which Preset has been used in which Slot, to avoid unnecessary synchronization mismatches.

Rack Presets

Clicking on the Preset Label area will open the Preset List :

- The Main Menu displays the Banks
- The Sub-Menus display the Presets



Clicking on the Menu Icon on the left will open the Preset Menu, from which you can :

- Rename/Delete the current Bank
- Import/Export Bank as ".ebf" files
- Visualize and Edit Preset Information
- Rename/Delete the current Preset
- Reload the current Preset in Snapshot A or B



Clicking on the arrows on the right will navigate through the Presets and Banks.



- Clicking on the Save Button will update your current Preset, or do the same as "Save As" if your Preset doesn't exist yet.
- Clicking on the Save As Button will open the Save Preset Panel, in which you can edit the Preset Information.



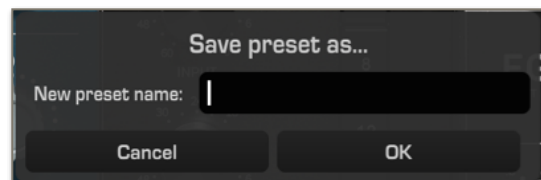
Module Presets

Clicking on the Preset Label area will open the Preset List, from which you can :

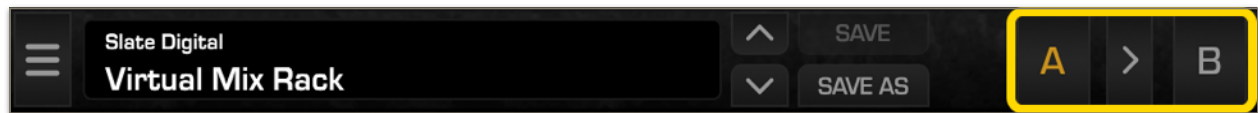
- Save/Save As the current Preset
- Delete the current Preset
- Reset the Module to its Default State
- Load a Module Preset



Clicking on the Save As Button will open the “Save Preset As...” Panel.



A/B Preset Snapshots



The Virtual Mix Rack offers a simple A/B System to quickly compare two Racks configurations.

A/B Snapshots can be controlled and switched from the dedicated A/B buttons.

The Plugin is always operating on one of the two Snapshots, A or B, the current Snapshot being highlighted in yellow.

Clicking on a Snapshot letter will switch your Rack to this Snapshot.

Clicking on the arrow between the two buttons will copy the current Snapshot to the other.

The A/B Snapshots can also be assigned from the Preset menu.

The Default Preset Feature

The Virtual Mix Rack Plugin has one additional feature which is the ability to override the Default State of the Virtual Mix Rack upon instantiation.

Clicking on the “Default Preset” icon in the Preset Bar will open the following menu :

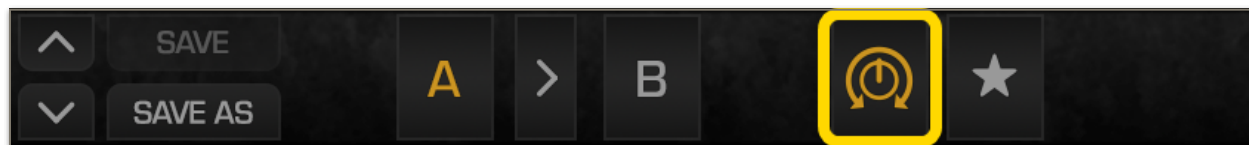


In this Menu :

- “Set Current As Default” will overwrite the default Modules configuration with the current Rack configuration
- “Restore Factory As default” will overwrite the Modules configuration with the Factory Default (an empty Rack)
- “Reset To Default” will reset the current Rack instance to the current Default Preset

Misc Features

Rotary Knob Mode



Clicking on the “Rotary Knob Mode” icon in the Preset Bar toggles the Knob Mode between Linear and Rotary.

In Linear Mode, the Knobs follow horizontal and vertical mouse moves.

In Rotary Mode, the Knobs follow circular mouse moves (*pretty useful on touch devices*).

The icon is highlighted in yellow when the Knobs are in Rotary Mode.

Note : fine adjustments (*Cmd/Ctrl+Drag*) are also available in Rotary Knob Mode.

About Panel

Clicking on the Slate Digital Logo in the Preset Bar opens the About Panel.



In this Panel :

- Clicking on the Slate Digital logo will redirect you to the Slate Digital Website.
- Clicking on the “Virtual Mix Rack” Label will open this User Manual.
- Left-Clicking on the Version Number Label will toggle between build information.
- Right-Clicking on the Version Number Label will open a quick support Menu.
- The Module Version Table displays useful information about all the installed Modules: their Names, Versions and Statuses.

Virtual Mix Rack Modules

Bundled with the VMR Plugin



The Mix Bundle



Revival



VU-Meter

The VU-Meter displays the level of the signal that is going out of the unit. The meter is calibrated to display 0VU when being fed by a 1kHz sine wave with a RMS level of -15dBFS.



Shimmer and Thickness

The Shimmer is playing with the high-end of the signal. It can be used to add air, brightness and clarity without harshness. The Thickness Control acts on the low-end, it will fatten just about anything up.



FG-116



GR Meter

The Gain Reduction Meter displays the amount of compression that is going on in the unit. This value is in dB.

Input/Output

The I/O controls adjust the Input and Output Gains of the unit. Increasing your Input Gain will result in more compression. When Input + Output equals 48dB, then the unit has a unity gain, meaning that the signal that the output signal has the same level as the input signal.

Moving the Input or Output Knob while holding the Shift key will link the two controls, meaning that the unit will keep an internal unity gain whatever your adjustment, giving you a very useful way to adjust the compression without being biased by a level change.

Ratio

The Ratio Buttons are used to switch between several compression ratios.

Attack/Release

The Attack and Release controls adjust the timing of the compressor. On both controls, 1 is the slowest position while 7 is the fastest.

Clicking on the Attack Knob while holding the Shift key will toggle the compression On and Off. When set to Off, the unit will internally bypass the compression, and the compression only, meaning that everything else is still processed (I/O Gains, Transformer etc.).



Noise Reduction

The Noise Reduction Switch toggles the Noise Reduction enablement. Noise Reduction is enabled by default.

Mix

The Mix Knob is a Dry/Wet control. It controls the blending between the compressed and uncompressed signals. It is very useful to achieve parallel compression without any additional routing required.



FG-401



GR Meter

The Gain Reduction Meter displays the amount of compression that is going on in the unit. This value is in dB.



Threshold

The Threshold Knob adjusts the Threshold of the compression stage. The lower the Threshold (in dB), the more compression you get.

Ratio

The Ratio Knob adjusts the slope of the compression curve.

Attack/Release

The Attack and Release controls adjust the timing of the compressor. Both controls have six positions, from the fastest to the slowest.



Make-Up

The Make-Up Knob adjusts the output gain of the unit. It goes from -24dB to +24dB.

Mix

The Mix Knob is a Dry/Wet control. It controls the blending between the compressed and uncompressed signals. It is very useful to achieve parallel compression without any additional routing required.



Transformer

The Transformer Switch toggles the Transformer enablement.

Circuit

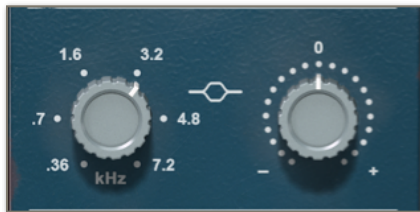
The Circuit Buttons toggles the compressor's processing between two different circuits. Circuit 1 is punchier and more dynamic, Circuit 2 is more transparent and gives more space to the bass.

FG-N



High-Shelf

The High-Shelf has only one Gain Control. This band operates at a fixed frequency.



EQ Bands 1 and 2

The EQ Bands have two controls : Frequency and Gain. Clicking on the frequency value labels will snap the Frequency Knob to the indicated value.



Low-Shelf

The Low-Shelf Band has two controls : Frequency and Gain. Clicking on the frequency value labels will snap the Frequency Knob to the indicated value.



HPF

The High-pass Filter Frequency Knob controls the frequency of the high-pass filter. When set to "Off", the High-Pass is disabled.



Line/Drive

The Line Knob adjusts the Input Gain of the unit. When the Drive Switch is enabled, then the Input Gain is compensated, so the level adjustment becomes a Drive control.

When disengaging the Drive Switch, the Line Control is automatically reset to 0dB. This is to prevent a sudden level boost that could occur.

FG-S



HF

The High Filter section has three controls: Frequency Knob, Gain Knob, and Bell/Shelf Switch. Clicking on the frequency value labels will snap the Frequency Knob to the indicated value.

The Bell Switch toggles the Filter between a Bell and a Shelf.



HMF

The High-Medium Filter section has three controls : Frequency, Q and Gain Knobs. Clicking on the frequency value labels will snap the Frequency Knob to the indicated value.



LMF

The Low-Medium Filter section has three controls : Frequency, Q and Gain Knobs. Clicking on the frequency value labels will snap the Frequency Knob to the indicated value.



LF

The Low Filter sections has three control : Frequency Knob, Gain Knob, and Bell/Shelf Switch. Clicking on the frequency value labels will snap the Frequency Knob to the indicated value.

The Bell Switch toggles the Filter between a Bell and a Shelf.



Filter

The Filter Frequency Knob controls the frequency of the High-Pass Filter. When set to "Off", the High-Pass is disabled.

iLok Protection

3rd Party iLok License Transfer Fee

When reselling any Slate software product, there will be a \$10 License Transfer Fee in order for us to process the new customer into our user database. It is the responsibility of the seller to inform the buyer of this fee at the time of sale.

Protection Messages and Statuses

The Virtual Mix Rack Plugin have two different kinds of Licenses :

- Rack License
- Modules/Modules Bundles Licenses

If you don't have the "Virtual Mix Rack" License on your iLok, then you will get this panel :



If you have the “Virtual Mix Rack” License, but then you don’t have one specific Module’s License, then only this Module will be disabled in your Rack, and the Information Panel will display a specific message :



Contacting Support

All technical support inquiries must be logged through our help desk for attention.

Please login to your help desk account at [Slate Digital Support](#). Click "Ask A Question..." and choose the respective category relevant to your product/query. And, be sure to include the information log within the ticket comments or as an attachment...

User System and Hardware Information Log

- Open the About panel.
- Right click on the version number to open a menu "Copy plug-in info to clipboard", click it.
- Open a text editor, an e-mail or a support ticket, and paste.

Example of information displayed:

Plugin & Host Information: -----

Version: <version number> - 64 bit
Build: <build number> <date> <time>
Format: <VST, AudioUnit, RTAS, AAX>
Host: <DAW name>

OS Information: -----

Name: <operating system name and version>
64 bit: yes

Hardware Information: -----

CPU: Unknown
Num cores (per cpu): 4
Num cores (total): 16
Speed: 2400 MHz
Max Cache: 12582912 bytes
CPU Flags: <mmx, sse, sse2, sse3, ssse3, sse4.1, sse4.2, etc...>
RAM (MB): 8192
Page size: 4096

Language Information: -----

User Lang: <FR, ENG, GER, etc...>
Region: <FR, ENG, GER, etc...>
Display Lang: <FR, ENG, GER, etc...>

Making the Virtual Mix Rack

By Fabrice Gabriel

The VMR started with two main ideas. Steven had the idea of a vertical rack much like the beloved 500 series that would allow engineers to have an entire track's mix chain on the screen at once. This would also allow engineers the ability to easily change the workflow of mixing, making it closer to what people are used to do in analog, with all the processors next to each other, with all their parameters accessible at the same time. And of course we wanted to create modules that would bring the sensation of analog mixing in the digital world with simplicity of use and the extraordinary sound that is scientifically analyzed, and approved by extensive listening.

For the first idea, I have to say that our development team did an amazing job, taking care of all the workflow details in a way that would make the Virtual Mix Rack a new experience in the digital world. It needed to be fluid, simple, and very reactive. Here the idea was to combine the straightforward aspect of analog gear mounted in a rack, with all the flexibility that software can bring.

For the second idea, we had to use all our knowledge from our past experiences, and bring it even further. Because the VMR is intended to be used in mixing situations, not only it has to sound perfect, but it also has to be very CPU efficient.

The sonic characteristics of each processor took an incredible amount of effort.

Starting with the compressors: the complexity of the FET compressor the FG-116 circuit's behavior has been inspired from has been very carefully reproduced. There are many aspects that make the sound of this processor special : the capacitors coupling, their charging/ discharging behavior, the feedback circuit structure, and of course all the saturation and transformer aspects.

It was definitely the hardest processor to make right, because of its highly level-dependent reactions, in all aspects. And the original is so legendary, that we didn't want to miss any aspect of it!

After so many hours of fine tuning, algo tweaking, and listening sessions, we now have a beautiful compressor that replicates the snappiness of the original, its raw dynamics, its saturation and bass warmth, and its very specific timing behavior.

We developed the FG-401 with the intentions of being one of these classic compressors that can be used in many different situations, that's why it has several settings. We initially modeled it from several VCA designs, but then gave it some modifications that allows it to be more versatile by adding new sonic options. Here it was very interesting to get creative, and that's why the circuit 1 and circuit 2 will be very diverse options for a variety of tracks.

For the EQs, the challenge was to reproduce the feeling that you have when using an analog EQ, which relies on very tiny details, all which need to be taken into account. This includes the way the EQ circuit saturates, the structure of its bands, the band interaction for the FG-S, the transformer for the FG-N, and the critical filter shapes. All of this was carefully analyzed and recreated in the algorithms.

The FG-S has a parallel topology for the two upper and two lower bands, so the HF and HMF bands, as well as the LF and LMF bands interact together. This is a key characteristic of the FG-S, and make this EQ extremely musical. A lot of work has been done by the team to reproduce this behavior perfectly, as well as integrating the different “issues” that the original circuit introduces, which also add to its musicality.

For the FG-N, again the work of the team has been extraordinary, from the transformer behavior or the curves matching, to the precise way with which the original circuit deals with saturation and harmonics. In order to reproduce the legendary analog feeling of this processor, all the tiniest details had to be reproduced, without distinction.

I’m very proud of the collective effort that made the Virtual Mix Rack and its modules a reality, the team effort was incredible and everyone was focused on the main goal: providing the best experience of analog feeling in the digital world.