

The dNa-ChannelRack

Channel Module Rack

High Quality DSP Plugin for
the Sonic Core Scope Platform

dNa – Digital&Analog

DSP Plugins for Sonic Core Scope platform



Preface:

Thank you for purchasing the dNa-ChannelRack. I can only hope it will bring lots of joy and creativity to your musical endeavor.

dNa has come a long way in developing plugins for the Scope Platform; main goal was always trying to create essential and intuitive plugins, which combine the best of my analog and digital experiences into the dNa products. This hopefully sets a new benchmark in what one can do with the platform; expanding the possibilities for it in being a true high-end multi effects unit which just gives you inspiration in making music.

One thing is for sure, I am very proud of this latest addition to the growing catalog of dNa plugins. And...I am very grateful for the users supporting dNa and Sonic Core in keeping Scope alive.

A special thanks goes out to the PlanetZ, Hitfoundry, OSS and FB friends and supporters with whom I've always had very nice personal contact with. Sorry i won't name you all, since I couldn't forgive myself if I forgot one of you, you know who you are! But one person in particular I have to name: Holger for making and keeping it all possible after all these years, and for being a good friend.

Sincerely,

Ray

The Master Section:



dNa Logo: Opens the About window.

Big VU Meter: Shows the VU Output metering...RMS levels are shown, not Peak values.

Numbers just above Peak Meters(1-6): Shows the bypass state of the separate slots.

Peak Meters: Show output peak levels of separate slots.

On: Functions as a master bypass switch, the red light is also used as an indicator.

Midi: Enable/Disable midi input and control receiving midichannel of unit. Midi off uses no DSP. Enable for remote controlling the unit.



Text/name field: You can fill in a custom name here, in the project view the name of the module will also adjust.

All Modules on DSP's: Loads all modules on DSP but not all internal functions of the modules. Certain functions are not loaded if not used to keep it as efficient and dynamic as possible.

The General Modules:

The Preamp module:



Drive: Uses a drive/softclipping circuit to add warmth and coloration to the signal.

LPF: Controls the lowpass filter to cut off the highs on preselected frequencies.

HPF: Controls the highpass filter to cut off the lows on preselected frequencies.

Phase: Flips the phase of the signal. Especially handy for LF material.

GAIN: Controls the gain of the signal for optimal signal. You can add more gain with Drive enabled.

Lower LED's: SGN shows if signal is present, CLP shows when Drive is softclipping, OL shows overload or too hot signal. On OL back off the gain.

PREAMP: The name below is also used as the **BYPASS** function switch!

The Insert module:



Insertfield: Select your mono inserteffect of choice from here.

Flipswitch: Switches the inserted effect off and unloads it from DSP. The LED on top indicates the state(RED-GREEN)

Input: Controls the insert's input level. (pre insert)

Output: Controls the insert's output level. (post insert)

INSERT: The name below is also used as the **BYPASS** function switch!

Please see the notes on insert functions in Scope further on in this document.

The Equaliser Modules:

The 4-Band EQ module:



“G” Rotary knobs: Controls the GAIN of each band in 2dB steps, going from a minimal of -18dB to a maximum of +18dB, values also show in the small display.

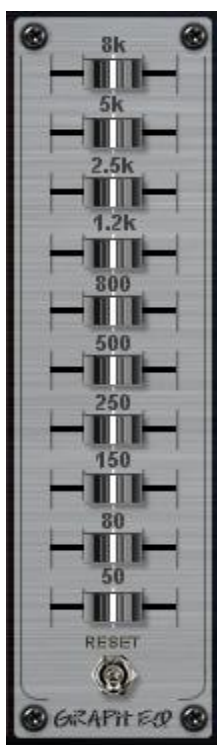
“F” Rotary knobs: Controls the FREQUENCY of each band by selecting preselected frequencies, values also show in the small display.

Flipswitches: Character of the EQ band.

- High band: Narrow width EQ or SHELF EQ; ***The Shelving is especially developed by dNa as a Passive type, resulting in a much smoother response.***
- HiMid: Narrow or wider width EQ, narrow is better for filtering, wide is nicer for coloration
- LoMid: Narrow or wider width EQ, narrow is better for filtering, wide is nicer for coloration
- Low band: Narrow width EQ or SHELF EQ; ***The Shelving is especially developed by dNa as a Passive type, resulting in a much smoother response.***

4-BAND EQ: The name below is also used as the **BYPASS** function switch!

The Graphic EQ module:



Horizontal faders: Controls the GAIN of each band on the indicated Frequency from -12dB to +12dB. Each band has optimized width settings.

Flipswitch RESET: Resets all the faders to their central 0dB position.

GRAPH EQ: The name below is also used as the **BYPASS** function switch!

The Dynamics Modules:

The Gate module:



ATK: Controls preselected settings of the attack of the gate. (Fast/Medium/Slow)

REL: Controls partially preselected settings of the release of the gate. (Fast/Medium/Variable)

TRS: Controls the Threshold of the Gate. This defines the level where the gate “closes”.

RED: Controls the Reduction of the Gate. This defines how much the gate “closes” or attenuates. The closing of the Gate is also displayed by the small LED meter.

The gate also comes with a keying function giving you a more precise control over it’s reaction.

Freq: Controls the Frequency of the keying function.

Gain: Controls the Gain of the keying function.

Flipswitch: Controls whether to use the keying function (or listening to it) or not.

GATE: The name below is also used as the **BYPASS** function switch!

Note on keying: Let’s say you have recorded for example a snaredrum, but that also has spill of the hihat or kickdrum, so the gates also triggers on that signal. That is an unwanted effect. With the keying function you could either choose to pop out the snare attack or filter out the lower frequencies of a kick or the higher frequencies of a hihat so it will react more to the snare signal itself.

The Compressor module:



RMS/Peak: Controls how the compressor behaves, more like a compressor in RMS mode or faster for limit purposes in the Peak mode. Let your ears and your logic decide.

Attack: Controls preselected settings of the attack of the compressor.

Release: Controls preselected settings of the release of the compressor.

Ratio: Controls preselected settings of the ratio of the compressor.

TRSH: Controls the threshold or level from where the compressor will start to compress.

GAIN: Controls the level which will be added after compression also known as makeup gain.

LED meters: These will show the attenuation(top) and output level of the compressor.

Flipswitch: Control the behavior of the compressor through its sidechain. This is a feature also known from the other renowned dNa compressors. Normal, Snappy or De-Ess. You could use the snappy feature to let it pump even less on signals with a lot of LF, and De-Ess for de-essing. (Vocals with too much sibilance, too much S sounds.) Or try it on other sources, as said, just let your ears decide.

COMPRESSOR: The name below is also used as the **BYPASS** function switch!

Notes on the insert functions in Scope:

There are some precautions to take care of when using the insert functions in Scope. Not only on this plugin, but in every Scope plugin!

-Case 1: Using this effect's insertfield or any effect using insert fields (P2) in an insert rack or insertfield of another plugin (P1); Saving the P1 to a preset, the parameters of the plugin in the P2 insertfield aren't recalled.

Case 2: Using a loaded multiFX or another plugin with an additional insertfields (P2) in the dNa-EffectRack's Insert Module (P1); Saving the P1(dNa_EffectRack) to a preset, the parameters of a plugin in the P2's insertfield aren't recalled.

In other words: It is not possible(or at least its settings) to save an insert in an insert of an insert. Rather confusing right?

Attempt #2: It is not possible to save settings of an effect (#1) that is in an insertslot of another effect (#2), while effect #2 is loaded as an insert.

This is not an error in any of the plugins, this is a "problem" in Scope. The workaround if you are using this scenario is to save the project. Then it should recall as saved.

General Tips and Tricks for running DSP hardware on PC:

There is already a lot of information on PlanetZ about configuring your HW and BIOS for optimal DSP performance, but I thought I'd sum some of them here (thanks to GaryB for his knowledge on this subject):

Quoted from PlanetZ.com:

"as in the letter that came with v5.1, in the bios(you may have already done this) disable any of these things, or anything that is obviously the same, but slightly differently named:

Intel EIST
Intel C State
C1E Support
Overspeed Protection
Hyperthreading
Execute Bit Support
Set Limit CPUID MaxVal to 3 (maybe not so important)
Intel Virtual Tech
Intel VT-d Tech
"

For me personally also setting the PCI latency timer from 32 to 96 or even 128 enhanced stability.