

MILLENNIA NSEQ-2 Plugin

Twin Topology Parametric EQ with added M/S Mode
High Resolution. Transformerless.



READ THIS!! The NSEQ-2 operates with lethal operating voltages – the voltage inside the NSEQ-2 can kill you.*

“Thank you for using the Millennium Media NSEQ-2 with Twin Topology. The NSEQ-2 is the result of meticulous listening tests on numerous circuit, topology, and packaging designs. Your NSEQ-2 is a finely tuned instrument intended for critical professional applications.

We feel it is the world's most sonically neutral analog EQ.

With the emergence of 24+ bit digital audio, recording engineers are faced with a new requirement for undistorted dynamic range. The NSEQ-2 meets this challenge exceptionally well.” *

Twin Topology is a Millennium-exclusive design technique which combines 50V discrete solid-state amplifiers and 400V vacuum tube amplifiers in the same chassis.

Tube or solid-state audio paths are selectable from a front-panel switch.

* = from the hardware NSEQ-2's manual.

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PLUGIN ALLIANCE

The MILLENNIA NSEQ-2 plugin can be installed and operated like any other UAD2 plugin. Please check www.uaudio.com for general info about the system requirements, etc.

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[1] BAND IN/OUT SWITCH "IN"

Pushbutton switch which places its EQ band in circuit or out of circuit. EQ band is in circuit when switch is depressed and LED is illuminated. Because of the NSEQ-2's unique shunt design, EQ bands should have no detectable sonic signature when they are in circuit as long as the boost/cut control [4] is set at zero. Band In/Out switches are provided for comparing a band's EQ setting versus flat response.

[2] FREQUENCY SELECT SWITCH

Rotary switch [gold contacts, mil spec] which selects fixed high and low band frequencies.

[3] PEAK/SHELF SWITCH

Pushbutton switch which selects high and low band curve shape. When switch is depressed and LED is illuminated, EQ is shelving at 6 dB per octave. When switch is not depressed, EQ is peaking with a fixed "Q" of 1.0.

[4] BOOST/CUT CONTROL

Conductive plastic rotary potentiometer offering up to +20 dB of boost and -20 dB of cut. Can also be configured for +/-10 dB via master gain range switch [10]. Boost/Cut Potentiometer has 21 detented positions for accurate repeatability and logging.

[5] PARAMETRIC FREQUENCY CONTROL

Conductive plastic rotary potentiometer which sweeps all center frequencies from 20 Hz to 25 kHz. The low-mid band sweeps 20 Hz to 220 Hz -or- 220 Hz to 2.5 kHz, depending on the status of frequency range switch [6]. The high-mid band sweeps 250 Hz to 2.5 kHz -or- 2.5 kHz to 25 kHz, depending on the status of Frequency Range Switch [6]. This control is optionally available with 21-step detents for accurate repeatability and logging.

[6] PARAMETRIC FREQUENCY RANGE SWITCH "10X"

Pushbutton switch which selects 1X or 10X parametric frequency range. When switch is depressed and corresponding LED is illuminated, frequencies as shown on front panel legend are multiplied by 10X. When switch is not depressed and LED is not illuminated, frequencies are as shown on front panel legend.

[7] PARAMETRIC QUALITY CONTROL "Q"

Conductive plastic rotary potentiometer which sweeps "Q" [Quality factor] from 0.4 to 4.0.

"Q" is defined as the ratio of the center frequency to the bandwidth. For example, a filter setting with 3 dB down points near 100 Hz and 1000 Hz exhibits a "Q" of approximately 0.4.

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[8] MASTER CHANNEL IN/OUT SWITCH "IN"

Pushbutton switch which places the corresponding four band EQ channel in circuit or out of circuit. EQ channel is in circuit when switch is depressed and LED is illuminated. When switch is not depressed, or when NSEQ-2 power is off, the EQ channel is completely bypassed.

[9] TT SELECTION SWITCH "TWIN TOPOLOGY"

Pushbutton switch which selects the corresponding channel as a complete vacuum tube EQ or a complete solid state EQ. Not a gimmick, Twin Topology is designed around two world class, musically optimized, all Class-A amplifiers — one amplifier is based on twin triode vacuum tubes, while the other is based upon all discrete J-FET servo amplifiers. Like having two distinctly different equalizers in one chassis.

When switch is depressed and LED is illuminated, the channel is operating as a discrete solid state EQ. When the switch is not depressed, the channel is operating as a high voltage vacuum tube EQ. Because of the NSEQ-2's unique shunt design, individual EQ bands will have no detectable sonic signature when they are in circuit as long as the boost/cut controls are set to zero.

[10] GAIN RANGE "10 dB"

Pushbutton switch which determines the range of channel boost/cut. When switch is depressed and LED is illuminated, the corresponding channel offers +/-10 dB of boost and cut. When switch is not depressed, the channel offers +/- 20 dB of boost and cut. Use the +/- 20 dB setting for rough adjustments or deep repairs. Use the +/- 10 dB setting for most artistic EQ requirements.

[11] LINK BUTTON

When active the stereo version of the EQ can be adjusted by just 1 set of controls. Turning a knob on either side of the EQ (L/R or M/S) will set the corresponding knob of the other channel to the same values.

The channels are un-linked and can be set to different values when the LINK switch is not activated.

[12] POWER SWITCH "POWER"

Fully bypasses all processing of the plugin.

[13] TRIM CONTROL (Plugin only)

Using EQ in the digital domain can cause clipping, especially when applied to a normalized file. With the TRIM pot you can attenuate the output gain (-20dB to 0dB) to avoid digital clipping. The hardware NSEQ-2 does not have the TRIM pot.

[14] M/S (Plugin only, available on stereo channels only)

By activating the M/S knob the NSEQ-2 plugin internally splits the stereo signal into M (mid) and S (side) channels. M/S is also referred to as Sum & Difference. You can now EQ the M and the S channels individually, allowing for tweaks simply not possible with a standard Left / Right EQ.

You may want to try the M & S Solo Buttons of the Brainworx bx_digital EQ. Listening to M & S in solo mode will help you understand the basics of what M/S really is. bx_digital is available for the UAD2 platform via uaudio.com.

MILLENNIA NSEQ-2 Hardware Info

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EQUALIZER PARAMETERS

"Q" Range	Q = 0.4 to 4.0, sweepable
Maximum Boost & Cut	+/- 20 dB [21 step detent]
Minimum Boost & Cut	+/- 10 dB [21 step detent]
Low Range Fixed Frequencies	20, 34, 56, 100, 180, 270 Hz
High Range Fixed Frequencies	4.8, 5.8, 8.0, 10, 16, 21 kHz
Low/High Range Fixed "Q"	Q = 1.0
Low-Mid Parametric Sweep Frequencies	20 Hz to 220 Hz -or- 220 Hz to 2.5 kHz
High-Mid Parametric Sweep Frequencies	250 Hz to 2.5 kHz -or- 2.5 kHz to 25 kHz
Hardware Bypass for Each Channel?	Yes
Peak/Shelf Selection on Hi & Lo bands?	Yes
Bypass Selection on Each Band?	Yes
Twin Topology Selection	FET Amplifiers [in] / Vacuum Tube Amplifiers [out]

Check the hardware?
MILLENNIA NSEQ-2 HARDWARE WEBSITE

<http://www.mil-media.com>