SYNTAX ERROR

audio computer system

The Syntax Error takes your tones back to the dial-up era, when video games were measured by their bits and telephones were wired to your wall. Inside, the primitive sounds of microchips await.

It's time to blow the dust out of your cartridges and plug in your controllers. Set your modem for 14,400 baud and let the games begin.

The sonic scientists at Alexander Pedals have been working overtime to cram the most pedal into the smallest box, and we now present the Neo Series! Each Neo Series pedal incorporates an advanced 32-bit microcontroller adding presets, expression, and MIDI capability.

NEO SERIES

GETTING TO KNOW YOUR NEO

CONTROLS

Sample (Bonus): Adjusts the sampling rate of the audio computer system. Sampling rate is minimum / most degradation with this knob clockwise. Hold the select button and turn this knob to set the Bonus parameter, which controls a different function in each mode.

Code: Controls a different parameter in each mode. In Stretch mode, this knob controls the sample clock direction and speed. In Cube mode, this controls the gain of the distortion. And in Ring mode, it adjusts the speed of the modulation sample-and-hold.

Mix (Volume): Controls the amount of effected signal. Turn fully clockwise to "kill" the dry signal. Hold the select button and turn this knob to set the Volume of both wet and dry signals.

Tweak: Controls a different parameter in each mode. In Stretch mode, this knob controls the length of the sample buffer. In Cube mode, this controls the cutoff frequency of the low-pass filter. In Ring mode, this sets the depth of the sample and hold filter modulation.

EFFECT MODES

Tap the Select Button to move to the next mode.

Stretch: This one will really mess with your drummer's head. We sample the incoming audio and stick it in a buffer, then play it back. Pretty standard, right? Wrong. Turn the Tweak knob to set the length of the buffer, then set the Code knob to adjust the sample playback clock. The clock speed adjusts from +1 (normal speed) to -1 (reverse playback!) Use the Bonus control to change the feedback into the delay line for trippy echo tones.

Hint: Set the Code knob near noon to completely break everything.

Cube: This is probably the most normal sounding thing in here. The Code knob controls the gain and mix on a cubic distortion algorithm. Here's how we do it: (abs(INPUT^3))^3. It sounds great, if you like math. Every distortion circuit (or program!) needs a tone control so we added a resonant low-pass filter. The tone filter is bypassable, just turn the knob fully counter-clockwise. The Bonus parameter controls the resonance of the filter.

Ring: This mode combines a ring modulator with a sample and hold LFO. Code controls the speed of the sample and hold, while Tweak controls its depth. Set Code to minimum to disable the LFO for a "normal" ring modulator (is that a thing?) The Bonus parameter controls the EQ of the modulated signal.

Freq: Shifts the frequencies of the input signal by a fixed amount. This one will change the pitch of incoming audio but unlike a traditional pitch shifter it doesn't maintain the intervals between the notes you play into it. The Code knob adjusts the amount of frequency shift and the Tweak knob controls the amount of signal that gets fed back into the shifter. Want more options? Use the Bonus knob to change the time delay of the feedback, for comb filtering and flanging textures. This mode ranges from beautiful bubbles to gargling nightmares, and don't forget you can add in the crush effects from the Sample knob to grunge things up!

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GREAT TONES. DOING GOOD.

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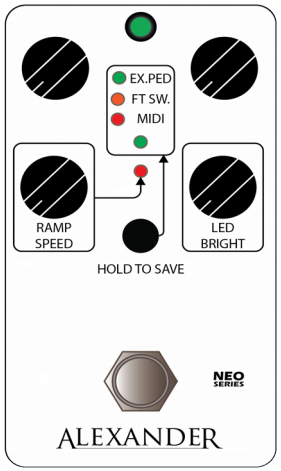
CONFIGURING YOUR NEO PEDAL



Power on the pedal while holding the Select button to enter configuration mode. Release the button when the main LED turns violet.

Tap the Select button to choose the MultiJack function. The upper program LED will change colors to indicate the function. Green = Expression Pedal, Orange = Foot Switch, Red = MIDI

Connect a MIDI controller to the EXP port and send a program change to set the Neo Pedal's MIDI channel.

Turn the lower left knob to set the Ramp Morph speed. The lower program LED will change colors to indicate the speed setting. Green = slow, Orange = medium, Red = fast.

Turn the lower right knob to set the main LED brightness.

Hold the Select button to save the configuration and exit.

BYPASS AND PRESETS

Tap the foot switch to toggle the pedal between bypass and active. The bypass signal is buffered and 100% analog. The dry signal path is routed through the DSP to maintain time and phase alignment with the effect signal.

Hold the bypass footswitch to move to the next preset. The Neo Series pedals have 16 presets, four of which are accessible on the pedal itself. The main LED will blink one, two, three, or four times to indicate the current preset.

Hold the select button down, then hold the footswitch down to save. The pedal will save the current settings to the active preset. The main LED will blink to indicate the preset has been saved.

EXPRESSION AND RAMP MORPH

The Neo Series feature a comprehensive expression control setup. Connect an expression pedal to the Neo pedal MultiJack (red) and sweep its treadle until the heel is down. Turn the knobs to your desired setting. Now sweep the expression pedal until its toe is down, and turn the Neo pedal's knobs to a new setting. You should now be able to sweep the expression pedal and hear the change in the Neo pedal! Please note that the Neo pedal's physical knobs won't move when you sweep the expression pedal but the pedal settings will change internally. The main LED will fade in and out to indicate the expression pedal position.

If you set up the EXP port on the Neo pedal for use with a foot switch, you can use it in the same way as the expression pedal. Tap the foot switch to make the Neo pedal Ramp down, then tap again to Ramp up. You can adjust the knob positions at these two settings and the Neo pedal will ramp between them at the speed you selected in setup. Neat!

If you prefer to use MIDI commands to control your pedal, both Expression and Ramp are accessible using MIDI continuous controller (CC) messages. Please consult the MIDI Control section for more details.

Please note that both the main AND alternate knob functions may be controlled by the expression or ramp controls!

MIDI CONTROL

Connect a compatible MIDI controller to the Neo pedal to access its full feature set!

The Neo pedal can accept MIDI over USB from a computer or mobile device, or from a MIDI controller using a 1/4" cable. The Neo pedals are compatible with interface converters made by Disaster Area Designs and Empress.

The following commands are accepted by the Neo pedal:

MIDI Program Change: Load Presets 0-15
0-3 are the four Red presets on the pedal itself.
4-7 are the Green bank
8-11 are the Blue bank
12-15 are the White bank

MIDI Continuous Controller 93: Tap Tempo
(supported pedals only)

MIDI Continuous Controller 97: Ramp
Send value 1-8 to set the ramp speed
Send any other value to trigger the ramp

MIDI Continuous Controller 100: Expression Pedal
Value 0 = Heel down, Value 127 = toe down

MIDI Continuous Controller 102: Bypass
Value 0-63 = Bypass, Value 64-127 = Engage

MIDI Continuous Controller 50-57: Pedal Knobs
Value 0 = CCW, Value 127 = CW

CC 50 = Lower right main	CC 54 = Lower right alt
CC 51 = Upper left main	CC 55 = Upper left alt
CC 52 = Upper right main	CC 56 = Upper right alt
CC 53 = Lower left main	CC 57 = Lower left alt

MIDI Continuous Controller 59: Mode Select
Accepts values 0-7 to select modes 1-8.
(Not all Neo pedals support the full 8 modes.)

MIDI Channel Assignment:

Set the Neo pedal to Config mode by holding Select at boot, then send a MIDI program change on your desired MIDI channel to set the Neo pedal's MIDI channel. Hold the Select button to save the MIDI channel assignment.

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