

neunaber
AUDIO EFFECTS USA

ELEMENTS SERIES

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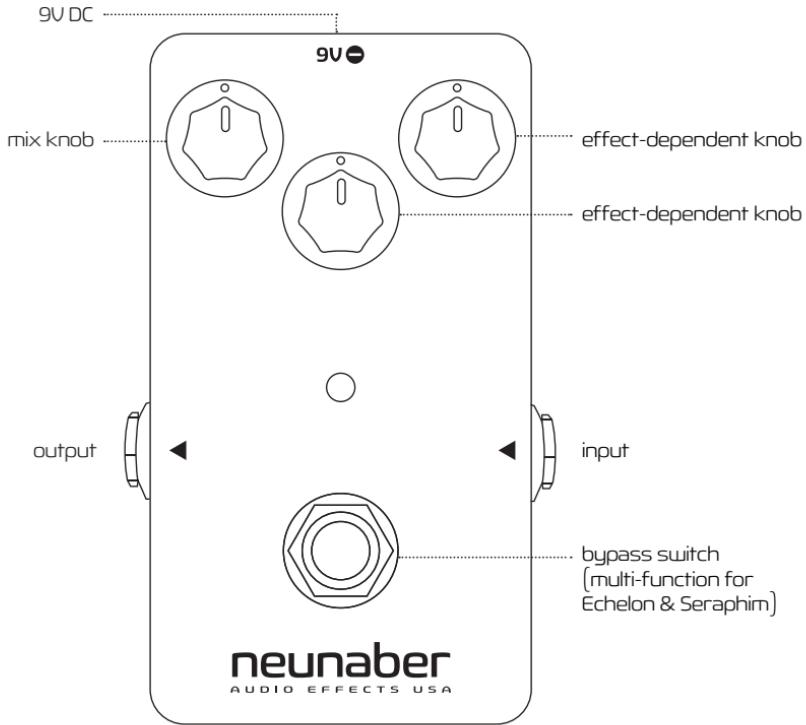
USER GUIDE

Thank you for purchasing our product. We really mean it. We hope to earn your trust by delivering a quality product that inspires you to make great music.

Neunaber products are designed and manufactured in Orange, California USA.

Please visit **www.neunaber.net** for more information and support.

PEDAL MAP



CONNECTIONS

We recommend that this pedal be placed at the end of your chain, after all other effects. If you are using the overdrive channel of your amplifier, this effect should be placed in the effects loop for best results.

The **POWER JACK** accepts a standard (5.5 mm OD x 2.1 mm ID) center-negative pedal power adapter (not included). The power adapter must be between 9 V and 12 V and capable of supplying 80 mA or more.

The **INPUT JACK** (right side) accepts input directly from your instrument, amplifier effects loop output, or other effect pedals via a standard 1/4" (6.35 mm) phone connector.

For line-level (+4 dBu) input, we recommend keeping the Mix knob below 60% and using a 12V power adapter.

The **OUTPUT JACK** (left side) supplies output to another effect pedal, an amplifier, or effects loop return via a standard 1/4" (6.35 mm) phone connector. The buffered output is capable of driving long cables. If plugging into the input of an amp, you should use the low impedance (Lo-Z) input if available.

The **FOOT SWITCH** bypasses the effect. The LED lights when the effect is active. Bypassing the effect does not lower power consumption, because it does not turn off power to the pedal.

- for the Seraphim, a long press of the foot switch enables/disables the shimmer effect
- for the Echelon, the foot switch can be used to tap the delay time

BYPASSING

With the buffered-bypass version, the signal is always buffered whether the LED is on or off. With the true bypass version, the bypassed signal may be selected to be buffered or true bypass. The three bypass modes are:

- Buffered Trails—allows the effect signal to trail off naturally after the pedal is bypassed
- Normal—cuts off the effect tail immediately when the pedal is bypassed. This mode is true bypass for the true-bypass version of the pedal.
- Two-stage Bypass (Wet Reverb only)—allows the reverb to trail while the footswitch is held down, then cuts off (to true bypass if available) when the footswitch is released.

CHANGING THE BYPASS MODE

When the pedal powers on, the LED will blink to indicate the bypass mode:

#Blinks (per sec)	Bypass Mode	Priority Mode (Echelon only)
1	Buffered Trails	Bypass
2	Normal/True Bypass	Bypass
3	Two-stage (Wet only)	-
3	Buffered Trails (Echelon only)	Tap
4	Normal/True Bypass (Echelon only)	Tap

See the Tap Tempo section of the Echelon Echo for more information about Priority Mode.

To change the bypass mode, unplug the pedal or turn off the power supply. Hold down the footswitch while re-applying power to the pedal. The pedal will cycle to the next bypass mode, and the number of blinks per second indicates the current mode.

Repeat this procedure if necessary (by removing/re-applying power) until you have reached the desired bypass mode. Release the footswitch to resume normal start-up.

WET™ REVERB

The **MIX KNOB** controls the mix between the dry signal and reverb:

- Full counter-clockwise is 100% dry
- Full clockwise is 100% reverb, typically used with a parallel effects loop
- Approximately 3 o'clock is an even mix: half dry/half wet

The taper of the Mix knob has been painstakingly tailored so that you may easily dial in just-a-touch through completely awash in reverb.

The **TONE KNOB** controls the tone of the reverb only. The dry signal is not affected. Counter-clockwise is darker; clockwise is brighter.

The **DEPTH KNOB** controls the length of the reverb tail; or in other words, the size of the acoustic space.

SERAPHIM™ SHIMMER

The **MIX KNOB** controls the mix between the dry signal and effect:

- Full counter-clockwise is 100% dry
- Full clockwise is 100% effect, typically used with a parallel effects loop
- Approximately 3 o'clock is an even mix: half dry/half wet

The **DEPTH KNOB** controls the length of the reverb tail, or in other words, the size of the acoustic space.

The **SHIM KNOB** controls the amount of shimmer in the effect. With this knob fully counter-clockwise, there is no shimmer: the effect is reverb only.

Switching Between Shimmer and Reverb-Only

Using the footswitch, you may select between reverb-only and shimmer reverb:

- A short press (less than ½ second) enables or bypasses the effect—both reverb and shimmer.
- A long press (greater than ½ second) enables or bypasses the shimmer only, whether or not the effect is currently bypassed.
- The LED indicates the current mode as follows:

LED	Effect	Bypass
constant off	reverb	bypassed
constant on	reverb	enabled
short pulse	shimmer	bypassed
long pulse	shimmer	enabled

When the shimmer effect is disabled (reverb-only mode), the Shim knob is also disabled.

ECHELON™ ECHO

The **MIX KNOB** controls the mix between the dry signal and echo:

- Full counter-clockwise is 100% dry
- Full clockwise is 100% echo, typically used with a parallel effects loop
- Approximately 3 o'clock is an even mix: half dry/half wet

The **REPEATS KNOB** controls the number of echo repeats, or in other words, the amount of regeneration.

The **TIME KNOB** controls the echo time. The maximum time is 1 second, and the minimum is 50 ms. The numbers around the knob indicate the time in fractions of 1 second.

TAP TEMPO

Turn the Time knob to “1” and tap the foot switch to the beat (quarter-note tempo). The echo time will change to the interval between the last two taps. The two taps must be less than 1 second apart (greater than 60 BPM), because the maximum echo time is 1 second.

The LED will blink the tempo and its blink style indicates whether the pedal is bypassed or active:

- Bypassed: short on, long off
- Active: long on, short off

You may set the tap tempo at any time, whether the pedal is active or bypassed. To cancel the tap tempo and return to the Time knob setting, hold the footswitch down for at least 1 second.

TAP DIVIDE (Tempo Subdivisions)

When tap tempo is active, you may use the Time knob to set the tap divide. The marks around the Time knob indicate time in fractions of the tapped tempo. These fractions are equivalent to music tempo as follows:

Fraction	Tempo Subdivision
1	Quarter-note
3/4	Dotted 8th-note
1/2	8th-note
1/3	8th-note triplet
1/4	16th-note
1/16	16th-note triplet

Since the bypass and tap tempo functions are duplexed, you have the option to choose which function takes priority:

- Bypass Priority—bypass/active is always toggled, tap tempo is set if switch triggered again within 1 second
- Tap Priority—bypass is toggled only when switch is not triggered again within 1 second. This results in a 1 second delay in bypassing but avoids changing bypass state when using tap tempo.

We recommend using Bypass Priority if you rarely use tap tempo. Otherwise, we recommend Tap Priority. Changing between these modes is described in the Changing the Bypass Mode section.

SPECIFICATIONS

Electrical

Nominal input level, Mix < 60%	+4 dBu, line level
Nominal input level, Mix > 60%	-10 dBV, instrument level
Input impedance	1 MΩ
Output impedance	1 kΩ
Gain, enabled vs. bypass	+/-0.5 dB (dry signal only)
Frequency response	20 Hz—20 kHz, +0.1 dB, -0.5 dB (dry signal or bypassed)
Total harmonic distortion	< 0.0015% typical (dry signal or bypassed, 22 Hz—22 kHz, 1.0 Vrms, 1 kHz)
Signal-to-noise ratio	109 dB, dry/bypassed signal (typical, A-weighted) 100 dB, Mix @ 50% (typical, A-weighted)

Power

Power adapter input	9-12 V DC, 80 mA buffered, 95 mA true bypass plug: center-negative, 5.5 mm OD x 2.1 mm ID
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Physical

Dimensions	2.9" W, 4.6" L, 2.0" H 73 mm W, 117 mm L, 51 mm H
Weight	7.0 oz / 200 g

**Specifications subject to change without notice.*

This is ~~not~~ a toy.

At Neunaber, we love to see what you guys do with your 'toys'. We encourage you to tag us in your posts, pictures & videos featuring your Neunaber gear! To stay connected, go ahead and follow us on the channels seen below. We can't wait to see what you do!



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Neunaber Audio Effects

This product contains no user-serviceable parts.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

California Proposition 65 Warning: This product may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm. While we believe our products are not harmful when used as designed, we provide this warning to comply with Proposition 65.

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