

## ECHELON ECHO v2 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.

## CONNECTIONS

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

### POWER

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 100 mA or more.

### INPUT

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

### OUTPUT

The output jack (top left) 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.

## FOOTSWITCH

The Engage switch selects between engaged and bypassed. 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.

Press and hold the footswitch for 1 second to enter and exit Tap Tempo mode. Release when the LED illuminates red.

While in Tap Tempo mode, you may engage/bypass by pressing the footswitch once and waiting 1 second.

## PRIMARY CONTROLS

#### MIX

The Mix knob controls the mix between the dry signal and effect:

- Full counter-clockwise is 100% dry
- Full clockwise is 100% echo
- Approximately 3 o'clock is an even mix: half dry/half wet

### REPEATS

The Repeats knob controls the number of echo repeats, or in other words, the amount of regeneration.

### TIME

The Time knob controls the echo time. The maximum time is 1 second, and the minimum is 50 ms. The white marks around the time knob indicate 100 ms increments.

# ALTERNATE CONTROLS

These controls are accessed by holding down the Engage footswitch while turning the knob.

### EFFECT

The Effect control switches between a Hi-fi Tape Echo and Lo-fi Delay.

Effect	LED color	Knob direction
Hi-fi Tape Echo	yellow	counter-clockwise
Lo-fi Delay	white	clockwise

### TRAILS

The bypassed signal may be selected to have trails or not. When Trails is on, the effect signal trails off naturally after the pedal is bypassed. When off, the effect cuts off immediately when the pedal is bypassed.

The LED will momentarily change color to indicate which bypass mode is selected.

Bypass Mode	LED color	Knob direction
Trails off	magenta	counter-clockwise
Trails on	cyan	clockwise

## ΤΑΡ ΤΕΜΡΟ

Press and hold the footswitch for 1 second to enter Tap Mode. Release when the LED illuminates red.

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 blinks to reflect the tempo.

You may set the tap tempo at any time while in Tap Mode, whether the pedal is active or bypassed.

To exit Tap Mode, press and hold the footswitch for 1 second. Release when the LED illuminates red.

### TAP DIVIDE (TEMPO SUBDIVISIONS)

In Tap Mode, the right knob controls rhythmic subdivisions. The control snaps to the closest marker.

Notation	Name	Delay Time Ratio
3 •••	1/8th note triplets	1/3
♪	1/8th note	1/2
	Dotted 1/8th note	3/4
	1/4 note	1

## **SPECIFICATIONS**

### ELECTRICAL

Nominal input level	-10 dBV, instrument level
Maximum input level	8 dBV
Input impedance	1M ohm
Output impedance	1k ohm
Level, enabled vs. bypass	0 dB
Frequency response, dry / bypassed	20Hz - 30kHz, +/-1dB
Total harmonic distortion, dry / bypassed	0.01 %
Signal-to-noise ratio, A-weighted	
dry / bypassed	116 dB
Enabled, all knobs 50%	101 dB

#### POWER

Input	9-12 V DC, 100 mA
Connector	center-negative, 5.5 mm OD x 2.1 mm ID

### PHYSICAL

Dimensions	115 mm L, 64 mm W, 46 mm H / 4.6" L, 2.6" W, 1.9" H
Weight	190 g / 6.7 oz

\*Specifications subject to change without notice.

At Neunaber, we love to see what you 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!



👜) Neunaber Audio

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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