

neunaber  
AUDIO EFFECTS USA

IMMERSE REVERBERATOR

# **IMMERSE REVERBERATOR**

## **USER GUIDE**

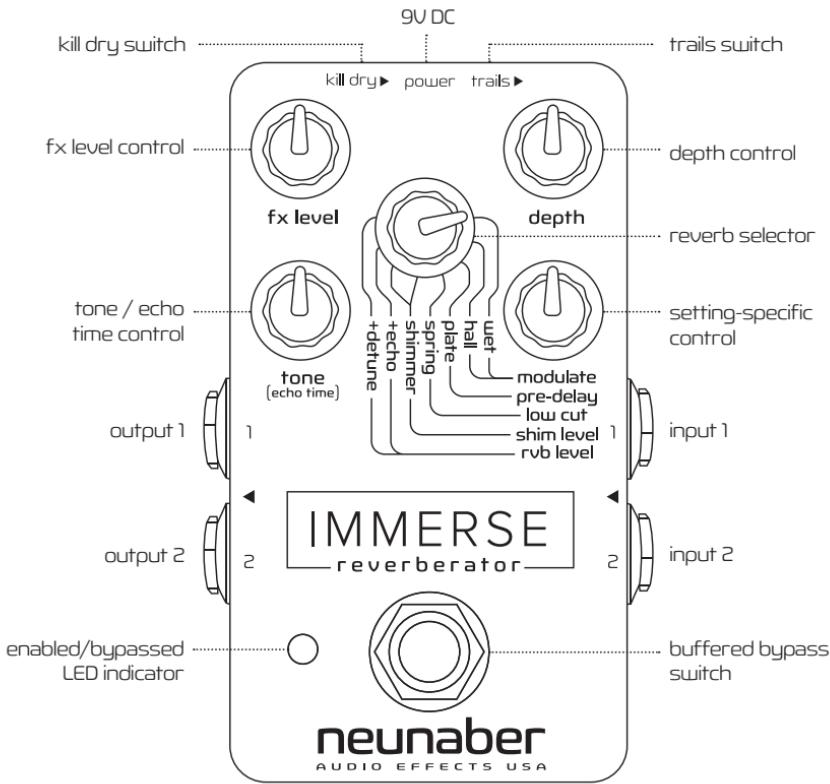
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Thank you for purchasing our product. We really mean it. We hope to earn your trust by delivering a quality product that inspires you to make great music.

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

Please visit **[www.neunaber.net](http://www.neunaber.net)** for more information and support.

## PEDAL MAP



## CONNECTIONS

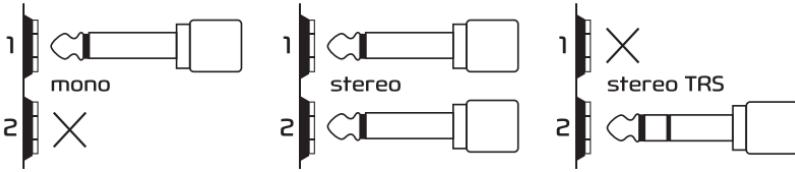
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We recommend that this pedal be placed at the end of your chain, after all other effects. If you are using the overdrive channel of your amplifier, this effect should be placed in the effects loop for best results.

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 70 mA or more.

The **INPUT JACKS** (right side) accept inputs directly from your instrument, amplifier effects loop output, or other effect pedals via standard 1/4" (6.35 mm) phone connectors.

- Input 1 only accepts a mono input.
- Both Inputs 1 & 2 accept a stereo input.
- Input 2 only accepts a stereo TRS input.



The input and output connections are independent. You may—for example—use a mono input with stereo outputs or stereo inputs with a stereo TRS output.

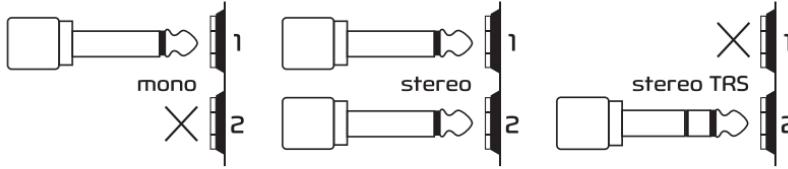
**Important Note:** input/output 1 and input/output 2 should not be used with two discrete signals (such as two different instruments).

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.

The Immerse Reverberator implements a high-quality buffered bypass. The signal is always buffered whether on or bypassed. We chose this type of bypass because the last output in a pedal chain should be buffered, and reverb is typically placed at the end of a pedal chain.

The **OUTPUT JACKS** (left side) supply output to another effect pedal, an amplifier, or effects loop return via standard 1/4" (6.35 mm) phone connectors. 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.

- Output 1 only supplies a summed mono output.
- Both Outputs 1 & 2 supply a stereo output. Using both outputs creates a stereo signal from a mono input.
- Output 2 only supplies a stereo TRS output.



The **KILL DRY** switch removes the dry signal, leaving only the “wet” (effect) signal. This should be enabled for parallel effect loops, and disabled for serial (common) effect loops.

The **TRAILS** switch changes the bypass mode between normal and trails. Trails allows the effect to naturally trail off after the pedal is bypassed. With normal bypassing, the effect is abruptly cut off; however, normal bypassing results in lower noise while the pedal is bypassed.

## EFFECTS

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Reverberation (“reverb”) gives your instrument a sense of acoustic spaciousness. There have been various methods of simulating this effect over the years, several of which have evolved into their own distinct sounds.

### WET™

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WET™ is an updated version of Neunaber’s renowned algorithm, with shorter pre-delay, higher initial density and more balanced imaging. (See suggested settings below.)

*adjusts the reverb level*



**fx level**

*SUGGESTED SETTINGS*



**depth**

*adjusts the length of the reverb tail (size of the acoustic space)*

*controls the tone of the reverb only*



**tone**

wet  
reverb  
echo  
spring  
plate  
hall



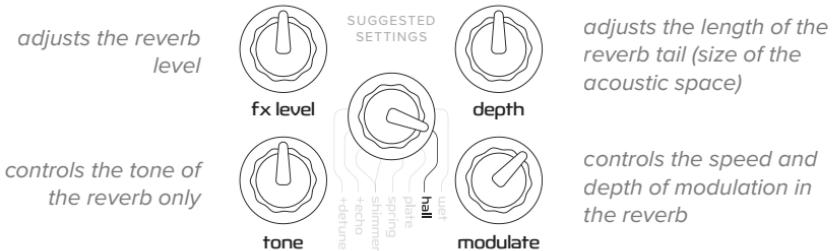
**modulate**

*controls the speed and depth of modulation in the reverb*

## HALL

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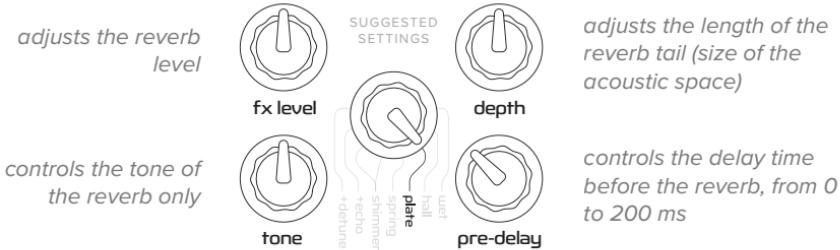
Hall reverb is known for its large, open sound—similar to what one may find in a well-designed concert hall.



## PLATE

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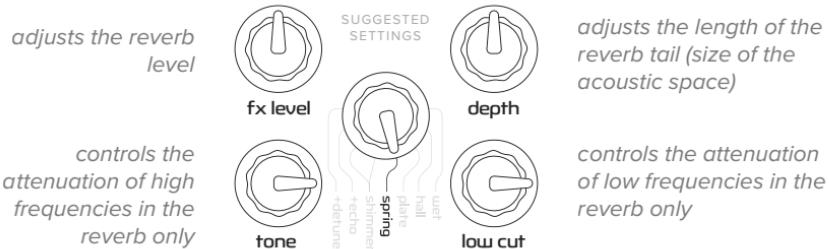
A physical plate reverb uses transducers mounted to a large, suspended metal plate. It is known for its bright, diffused sound.



## SPRING

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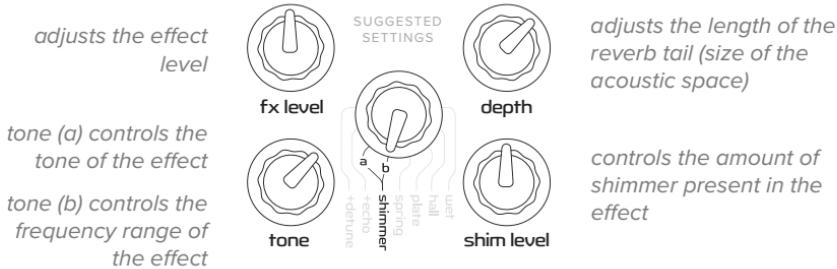
A physical spring reverb uses metal springs suspended between transducers and produces a distinctive initial “twerp.”



## SHIMMER A & B

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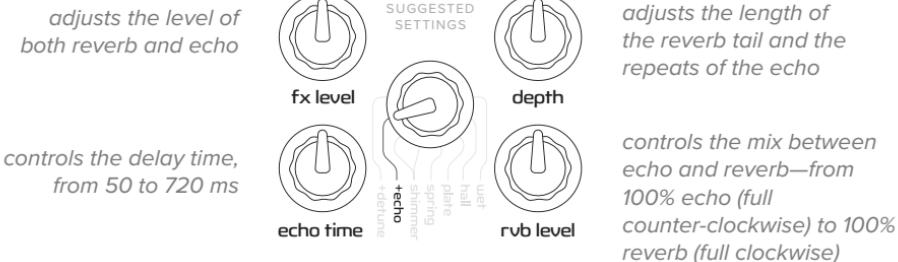
Shimmers are reverb effects reminiscent of a synth pad that follows what your instrument plays.



## +ECHO

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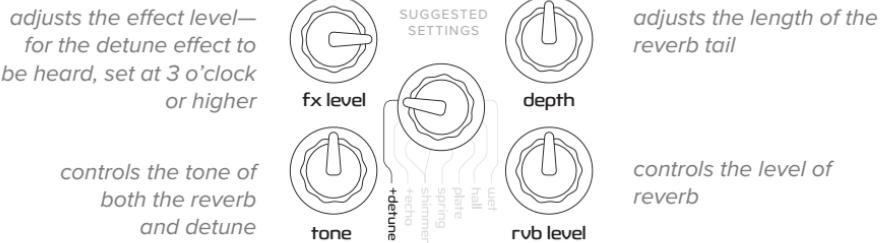
The +echo effect combines the Wet™ Reverb with an echo effect.



## +DETUNE

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The +detune effect combines the Wet™ Reverb with detune, which is a chorusing-like effect that adds in a slightly detuned double of the dry signal.



## SPECIFICATIONS

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### Electrical

|                           |                                                                              |
|---------------------------|------------------------------------------------------------------------------|
| Nominal input level       | -10 dBV, instrument level                                                    |
| Absolute max input level  | 6 dBV                                                                        |
| Input impedance           | 1 MΩ (mono), 2 MΩ (stereo)                                                   |
| Output impedance          | 500 Ω (mono), 1 kΩ (stereo)                                                  |
| Gain, enabled vs. bypass  | 0 dB (mix @ 0)                                                               |
| Frequency response        | 20 Hz—20 kHz, +0.1 dB, -0.5 dB<br>(dry signal or bypassed)                   |
| Total harmonic distortion | < 0.003 % typical (dry signal or bypassed,<br>22 Hz—22 kHz, 1.0 Vrms, 1 kHz) |
| Signal-to-noise ratio     | 112 dB mono, 110 dB stereo (A-weighted)                                      |

### Power

|                     |                                                                  |
|---------------------|------------------------------------------------------------------|
| Power adapter input | 9-12 V DC, 70 mA<br>Plug: center-negative, 5.5 mm OD x 2.1 mm ID |
|---------------------|------------------------------------------------------------------|

### Physical

|            |                                                     |
|------------|-----------------------------------------------------|
| Dimensions | 2.9" W, 4.6" L, 2.0" H / 73 mm W, 117 mm L, 51 mm H |
| Weight     | 8.5 oz / 240 g                                      |

*\*Specifications subject to change without notice.*

# This is ~~not~~ a toy.

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Neunaber Audio Effects

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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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