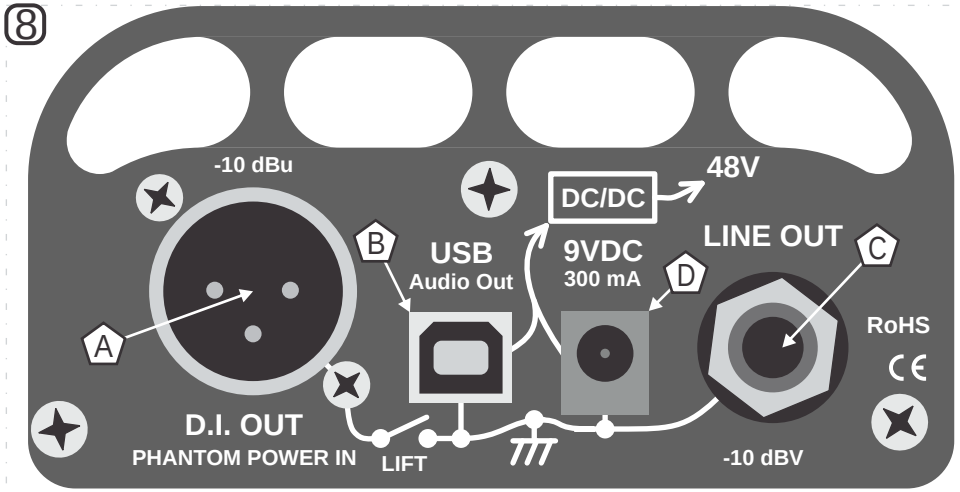


OUTPUT Connectors and External Power:
The device can receive its power from the phantom supply of your mixer via its D.I. OUT (A), from the USB port of your computer via the USB Audio Out (B), from a 9V adaptor via its 9VDC connector (D), or from a 9V Battery. It can produce 48V phantom power for your condenser mic when power is received from the USB port or the 9V adaptor. It cannot receive phantom power from your mixer when you use the LIFT switch to break a ground-loop.

A. The D.I. OUT connector (A) provides a balanced audio output for your mixer. It has a transformer isolation circuit that can break a ground-loop when you use the LIFT switch. See page 2, paragraph A for more information.

B. Connect the USB Audio Out connector (B) to your personal computer. The USB channel is 2.0 compliant and does not require special drivers for Windows operating systems. The rate of 16-bit conversion can be selected by your software from 8KHz to 48KHz. The signal-to-noise ratio is so high and the total-harmonic-distortion is so low that, any noise in the digitized audio is probably from your audio source or from the direct box's analog circuit. The direct box internally converts the 5V USB power to 9V so that no other power supply is required when you use the USB Audio Out feature.

C. The 1/4" LINE OUT phone jack (C) produces an unbalanced low-level audio output for your instrument amplifier or mixer. The output level can be adjusted via the VOL Knob. See page 4, paragraph W for more information.

D. The 9VDC connector can receive power from a regulated 9V adaptor. This input is compatible with most power supplies intended for guitar stomp boxes. You can use a switching-type power supply but it might cause you to hear digital "whistle" noise coming from the direct box. Do not attempt to use an adaptor having more than 9V output or an unregulated power supply. These can irreparably damage the direct box and void your warranty.

Lampifier®

Da Vinci Device

Audio Multi*Tool

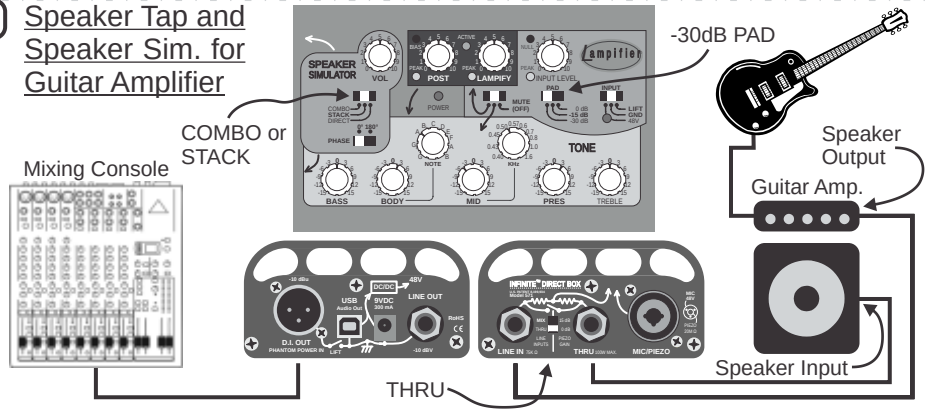
For Live Sound or Recording

User Manual

August 2015

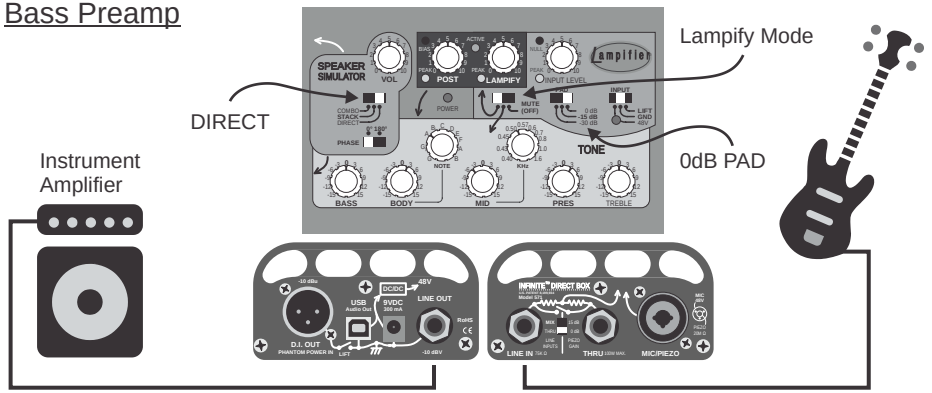
http://www.Lampifier.com

2 Speaker Tap and Speaker Sim. for Guitar Amplifier



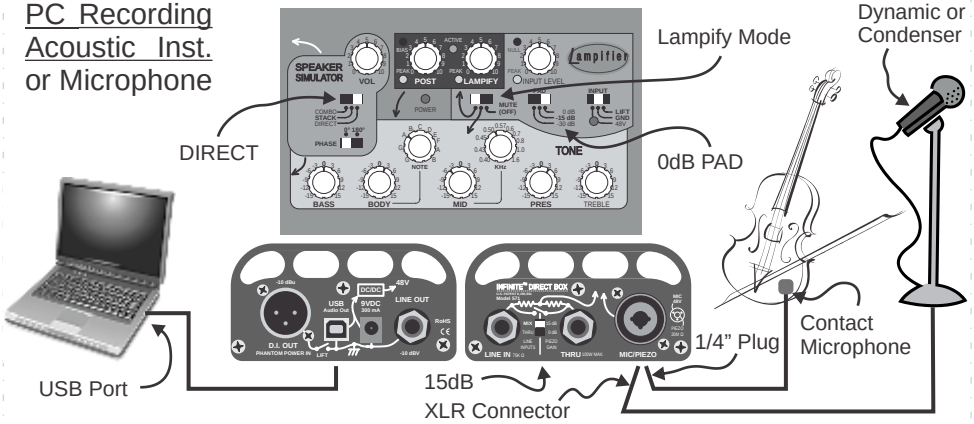
Captures the sound of a guitar amp without a mic. The device taps the speaker output and simulates a speaker cabinet for the D.I. Output.

Bass Preamp



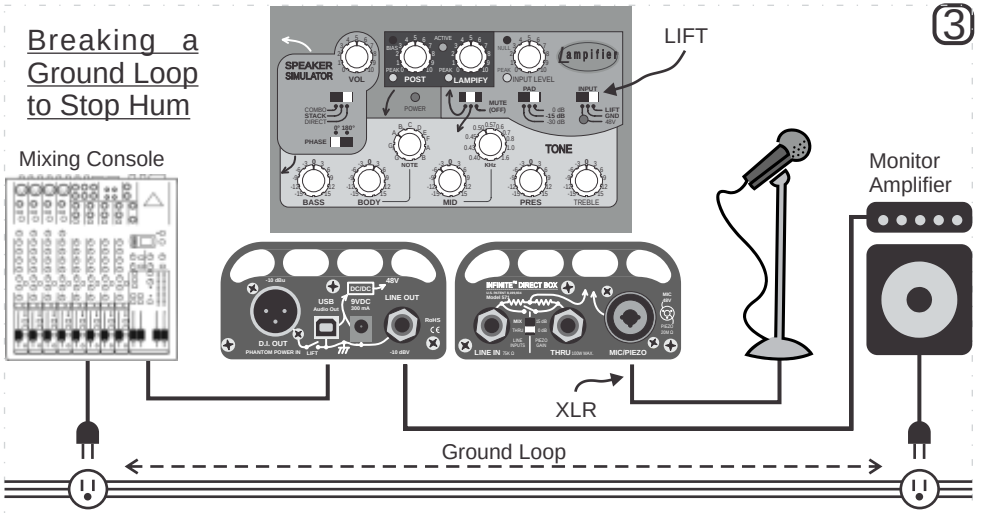
The Lampifier processor provided smooth response and good sustain. Add a contact mic or piezo pickup to use this setup for string bass instead.

PC Recording Acoustic Inst. or Microphone



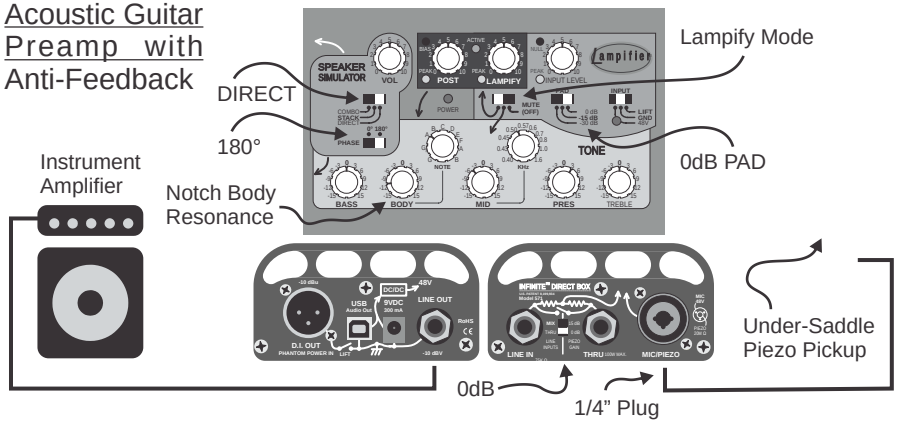
Make high-quality digital recordings of any audio source plugged into the device. Connect directly to your computer using the included cable.

3 Breaking a Ground Loop to Stop Hum



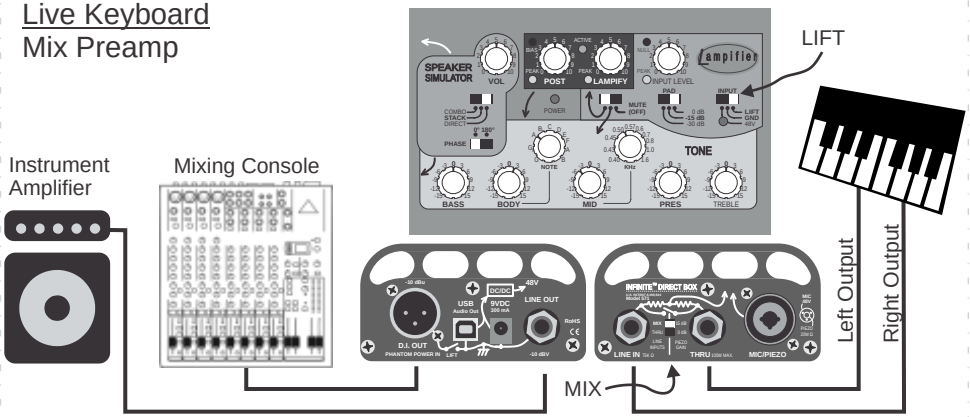
Eliminate an annoying ground loop between mixer, amp, computer, etc.

Acoustic Guitar Preamp with Anti-Feedback

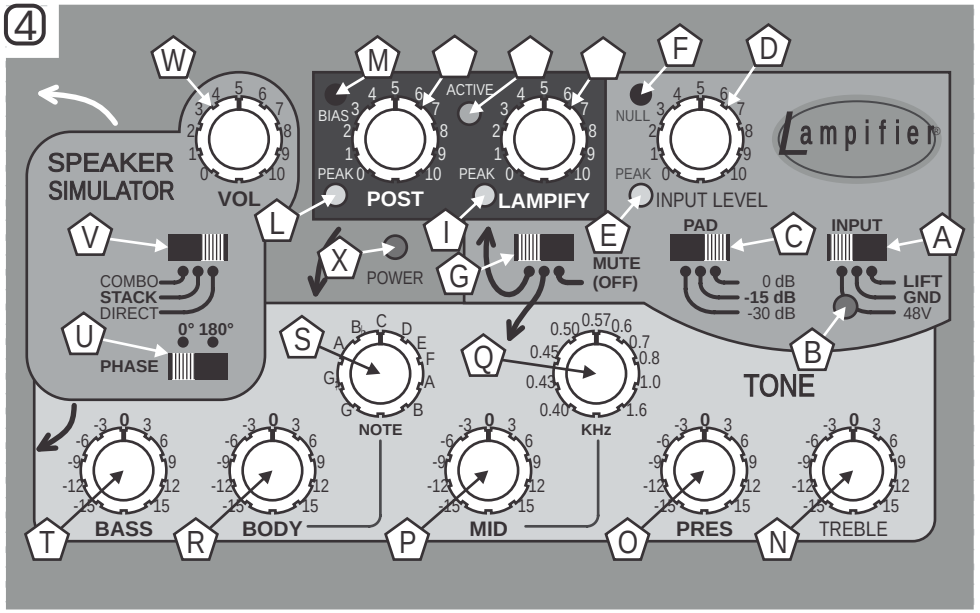


Add more detail and articulation while reducing low-frequency feedback.

Live Keyboard Mix Preamp



Mix left/right channels for live performance while breaking a ground loop.



INPUT Controls:

A. The INPUT switch (A) has 3 operating modes; 48V, GND, and LIFT.

1. 48V Mode: Slide the switch to the 48V position when the device must provide phantom power for your condenser microphone that you have connected to the MIC/PIEZO connector. To enable the phantom power, a microphone cable must be plugged into the MIC/PIEZO connector and the direct box must be receiving its power from a 9V adaptor or from a USB port.

2. GND Mode: Slide the switch to the GND position. This mode connects the D.I. OUT ground pin to the direct box ground. It enables the direct box to receive its power from your mixer's phantom power supply.

3. LIFT Mode: Slide the switch to the LIFT position to break a ground-loop that is causing an AC hum noise. This mode disconnects the D.I. OUT ground pin. It breaks the ground connection between your mixer and the direct box. In this mode, the direct box must receive its power from a 9V battery, a 9V adaptor, or a USB port because it cannot accept the phantom power from your mixer.

B. 48V phantom power indicator LED (B).
This LED turns on when the direct box is providing phantom power to your condenser microphone. See the previous paragraph for more information.

C. The PAD switch (C) has 3 operating modes; 0dB, -15dB, and -30dB.

1. 0dB Mode: Slide the switch to 0dB for the most commonly used mode. This mode has no effect on the audio input entering the direct box.

2. -15dB, -30dB Modes: Slide the switch to -15dB or -30dB to attenuate the audio input . Use these modes to avoid distortion caused by a high-level audio input such as an instrument amplifier speaker output.

D. Turn the INPUT LEVEL knob (D) to adjust the audio input entering the device. While the audio source is active, turn the knob clockwise until the PEAK LED (E) flashes. Then, turn the knob counterclockwise until the LED flashes only occasionally. If the LED does not stop flashing, use the Attenuation PAD. See page 2, paragraph C for more information.

E. The PEAK indicator LED (E) flashes to indicate that you need to turn the INPUT LEVEL Knob (D) counterclockwise to reduce audio distortion.

F. Do not adjust the NULL trimmer (F). It is preset at the factory.

G. The OFF switch (G) has 3 modes; MUTE (OFF), Normal, and Lampify.

1. MUTE (OFF) Mode: Slide the switch to the MUTE (OFF) position to turn off the device and stop discharging the 9V battery. This mode does not turn off the device while it is receiving its power from a 9V adaptor, a USB cable, or phantom power from your mixing console. Instead, it mutes all the device audio outputs; D.I. OUT, USB Audio Out, and LINE OUT.

2. Normal Mode: Slide the switch to the middle position for normal operation. This mode sends the audio signal to the TONE controls, while it bypasses the LAMPIFIER processor.

3. Lampify Mode: Slide the switch to the left position to enable the LAMPIFIER processor and to send the audio signal to the TONE controls.

LAMPIFIER Processor Controls:

H. Turn the LAMPIFY knob (H) to adjust the LAMPIFIER effect. Turn it clockwise to increase the effect or turn it counterclockwise for less effect. The effect increases details and articulation in the audio program.

I. The PEAK indicator LED (I) flashes to indicate that you need to turn the LAMPIFY Knob (H) counterclockwise to reduce audio distortion.

J. The ACTIVE indicator LED (J) flashes to indicate that the LAMPIFIER processor is affecting the audio signal. Turn the LAMPIFY knob (H) clockwise and set the OFF Switch (G) to the left position if this LED does not flash when the audio source is active.

K. Turn the POST knob (K) to adjust the audio level exiting the processor. Use this knob to make the audio output volume about the same when the OFF switch (G) is changed from the Normal mode to the Lampify mode.

L. The PEAK indicator LED (L) flashes to indicate that you need to turn the POST Knob (K) counterclockwise to reduce audio distortion.

M. Do not adjust the BIAS trimmer (M). It is preset at the factory.

TONE Controls:

N. Turn the TREBLE knob (N) to increase/decrease the audio program's high frequency content. The adjustment range is about +/-15dB at 16KHz.

O. Turn the PRES knob (O) to increase/decrease the audio program's presence. The adjustment range is about +/-15dB at 6KHz.

P. Turn the MID knob (P) to increase/decrease the audio program's midrange frequency content. The adjustment range is about +/-15dB.

Q. Turn the KHz knob (Q) to adjust the midrange frequency. The adjustment range is 0.40 to 1.6KHz.

R. Turn the BODY knob (R) to increase/decrease the audio program's low-midrange frequency content. The adjustment range is about +/-15dB.

S. Turn the NOTE knob (S) to adjust the low-midrange frequency. The adjustment range is 98Hz to 247Hz, which corresponds to "G" (3rd fret on the low-E string) of an acoustic guitar to the B-string (open 2nd string).

T. Turn the BASS knob (T) to increase/decrease the audio program's bass content. The adjustment range is about +/-15dB at 50KHz.

SPEAKER SIMULATOR Controls:

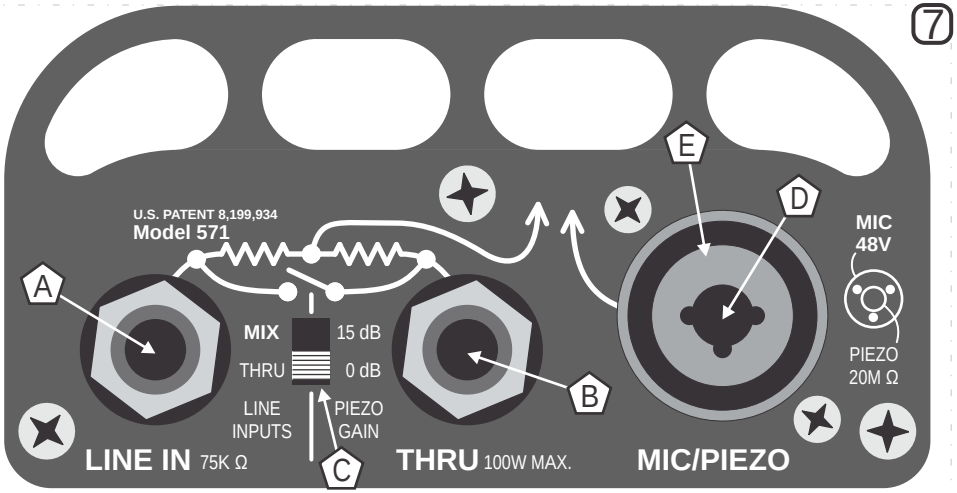
U. Slide the PHASE switch (U) to the 0° position to make the audio input and the audio output in phase. Slide it to 180° to make them out-of-phase.

V. Slide the SPEAKER switch (V) to the COMBO position to simulate the sound quality of a 2 x 12" open-back combo-type speaker cabinet. Slide the switch to the STACK position for a 4 x 12" acoustic-suspension speaker cabinet. Slide the switch to the DIRECT position for no speaker simulation.

W. Turn the VOL knob (W) to adjust the LINE OUT volume . This knob does not affect the D.I. OUT volume or the USB Audio Out.

POWER Indicator:

X. The POWER indicator LED (X) lights up when power is received and it has 4 blink patterns to tell you the status of the internal 9V battery.
No flashing = the battery is new.
1) Flash once every 2 seconds = the battery is good. 2) Flash once every second = the battery is used. 3) Two flashes every second = replace the battery. 4) More than two flashes every second = the battery is almost dead.



INPUT SIGNAL Connectors and Controls:

The device can accept an audio input from your analog sources via its 1/4" phone jacks or its XLR connector.

A. The LINE IN phone jack (A) accepts a single-ended or balanced TRS audio input from your low-level source (such as a musical instrument), or your high-level source (such as an instrument amplifier speaker output). For high-level sources, use the PAD Switch (page 2, paragraph C) to attenuate the audio input. When the LINE IN is used, it disables the MIC/PIEZO Inputs.

B. The THRU phone jack (B) can accept the same kind of inputs as LINE IN.

C. The LINE INPUTS/PIEZO GAIN switch (C) has two purposes:
1. For LINE IN and THRU: a) Slide the switch to the MIX position to mix the audio signals from the LINE IN jack and the THRU jack. b) Slide the switch to the THRU position to pass the audio signal in from the LINE IN jack, through the device, to the THRU jack. The switch can handle up to 100 watts begin passed-through to your speaker cabinet.
2. For the PIEZO input: a) Slide the switch to 0dB for low preamp gain for an under-saddle acoustic guitar pickup. b) Slide the switch to 15dB for high gain for a piezo contact microphone. Use the 0dB setting if the piezo preamp clips, as indicated by the PEAK indicator LED (page 3, paragraph E),after you have turned the INPUT LEVEL knob counterclockwise.

D. The MIC/PIEZO phone jack (D) can accept a high-impedance audio input from a piezo pickup (or a contact microphone) via its 1/4" phone jack.

E. The MIC/PIEZO jack (D) can accept a balanced, low-impedance audio input from your dynamic mic or condenser mic via its XLR connector. The mic's balanced audio signal is passed-through to the THRU jack (B) as TRS.