

Palmer

PGA-04 ADIG-LB Owners Manual



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Palmer PGA-04 ADIG-LB

Concept:

The **PGA-04 ADIG-LB** is the result of our efforts to further develop our legendary speaker simulator PDI-03, which has proven itself both live and in the recording studios worldwide and is being used by many artist to include, Keith Richards/Rolling Stones, Eric Lifeson/Rush, Warren Cucurullo/Duran Duran, Eddie Van Halen/Van Halen and Def Leppard, just to name a few. (see all artist that use Palmer on our website)

ADIG-LB, Advanced Direct Injection for Guitar-Load Box, is our registered trademark.

The PGA-04 offers the guitar player, sound engineer or producer, a world of new sonic possibilities far beyond the limitations of traditional speaker/microphone setup. Utilizing one rack space, the PGA-04 is a mono-passive speaker simulator featuring an integrated (internal 8Ω) load-box capable of 120 watts of continuous power with LED metering. Our unique and variable filter circuit with volume controls will enable you to shape your tone and blend both filtered and unfiltered sounds to your own taste. Additional features include balanced and unbalanced outputs and a speaker thru jack, giving you the option of using a speaker instead of the internal load. From the studio/touring professional to the amateur needing to practice silently with your guitar amplifier the PGA-04 offers you a wide range of sounds and interface options right at your fingertips, lending a great alternative to conventional mic'ing without the disadvantages of signal bleed, loud room/stage level and bad room acoustics.

Note: The PGA-04 is a totally passive unit (requiring no power) but requires the energy generated by an amplifier, it can only be used at speaker level and must be patched at the speaker output of your guitar/power amplifier. Since the internal load-box converts the amplifiers output power in to heat, care must be taken to properly place the unit in your rack, so that the vents are not completely covered.

Connecting your amplifier to the PGA-04:

Connect your amplifier speaker output to the Speaker Input jack of the PGA-04 by using an appropriate speaker cable 0.75mm/18 gauge minimum. If your amplifier has a speaker impedance selector switch, adjust it for 8Ω or use the corresponding output jack.

If you want to use your speaker cabinet instead of the internal load, plug the cabinet in to the speaker thru jack. In this application the internal load is disabled and the LED meter circuit will no longer function. Select your amplifier impedance switch for the impedance of your speaker cabinet. The internal load can only handle 120 watts however, when using a speaker cabinet, you may use an amplifier up to 200 watts.

Connecting your PGA-04 to your mixer or effects chain:

The PGA-04 has two unbalanced outputs ($10K\Omega$) connected in parallel and one balanced (XLR pin 2 hot 600Ω) output both having ground lifts. You may use any and all outputs at the same time. Simply connect your unit to your effects chain or directly to the snake/console or both using good quality shielded cable. If you experience a ground hum, use the ground lifts for the corresponding output to reduce or eliminate the hum.

Note: The maximum output level the PGA-04 will deliver is -10dBu.

Please remember that the load-box converts the amp's power into heat so, the ADIG-LB should be installed into a 19" rack giving the unit sufficient ventilation.

The front LED's show how much power is being sent to the load box. The last red LED should never under any circumstances constantly be lit, if it is you are in danger of damaging your unit. **When using an external speaker, the load-box is shut off and the LED's no longer work.**

Switches and controls:

Start with the ADIG-LB's volume controls (FILTER and FULL RANGE) turned all the way down. Now adjust your amp's volume by playing a chord and checking the ADIG-LB'S display (the first two LED's should light up with a 50w amp and the first three LED's should light at 100 watts.). Now you can adjust the output to your ADIG-LB using the FILTER VOLUME or FULL RANGE VOLUME controls. Note: We recommend that you leave the FULLRANGE VOLUME off in the beginning and start with the FILTER VOLUME control. The FULLRANGE VOLUME is unaffected or unfiltered signal therefore you must be careful not to use too much otherwise you will that infamous paper shredder sound. In short a little bit of full-range will go a long way. If you want to use more of your amps natural overdrive, increase the volume of the amplifier and compensate using the ADIG-LB's controls accordingly.

Voicing:

Anyone who's compared various speakers and cabinets can tell you how much they influence a guitar's sound. When creating a guitar sound, the microphone type as well as placement will also play a great role. The filter channel has two pots with which you can influence the high as well as the low frequency range. The HIGH control lets you adjust your sound from soft to MELLOW to aggressive BRIGHT. Of course we refrain from naming any brand names here, but the experienced musician will be familiar with the BRITISH/CALIFORNIA categories used to describe speaker character. The LOW control will determine cabinet type-the FLAT character stands for the sound most associated with the push of a stack of 4x12" speaker cabs. The wide range in between will satisfy any taste. The COLOUR switch determines the actual loudspeaker character. BROWN delivers a dark, slightly nasal basic quality, whereas LITE gives you more of an open sound.

The effect of the COLOUR switch is also dependent on the position of the HIGH control. Those who prefer really aggressive, distorted sounds should also mix in some of the FULL RANGE VOLUME remembering to use the HI-CUT switch, otherwise you'll end up with that infamous paper-shredder sound. When playing clean, however, it may be desirable to add some of the FULL RANGE VOLUME remembering to use the HI-CUT. The result will be a quasi-acoustic sound. Since we've gathered from sound engineers that they have used the PDI-03 for other instruments beside guitar, we believe the ADIG-LB's facility for mixing full range and filtered sounds will open up a whole new range of possibilities for the creative sound engineer. That is why we refrain from giving any examples of how to recreate this or that sound-ever guitar/amp combination has it's own unique sound, and the goal of any self respecting musician or sound engineer should be to create unique sounds!

Attention:

The internal load box uses tungsten lamps. These lamps will light up during constant high power operation. You'll see light through the upper and lower ventilation slits, possible the other openings as well. Don't panic, your machine isn't about to burn down. However, you should, as mentioned before ensure proper air circulation so that heat can dissipate.

Furthermore, we'd like to remind you that amplifier output tubes can and will wear out quicker when running the amplifier at higher levels. Should you be running your amp at full levels to achieve the sound you want, anticipate having to change tubes more often.

Specifications:

19"/1U passive DI for Loudspeaker Level

Integrated Load Box and Filter Section

Load Box nom. Input Impedance: 8 ohms, Rating: max Input Power 120wrms

Input Power Display: 6-pole LED chain, 3/10/30/60/120/200 watts

THRU jack (Speaker signal link) socket with break function disconnecting the internal load box

OUTPUT: 2 unbalanced jack sockets, 1 balanced XLR/m socket Pin 2 hot, All with floating ground

Output Impedance: unbalanced 10K Ω nom., Balanced 600 Ω nom.

Output level @ 14 volt input (app. 25W into 8 ohms) measured @ 1000Hz, filter volume full cw,

Unbalanced:0dBu, Balanced: -10dBu

Both values hold true at FULL RANGE Volume open, FILTER Volume closed.

Outputs via Isolating Transformer, GND switch connecting input/output ground.