

Little Devil Pre Amp - Designed by Wade Chandler Goeke

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Thank you for purchasing the Chandler Limited Little Devil Pre Amp. Your Devil is handmade in the USA by real people. What does that mean? We do not use large solder or component machines that pick and solder the parts. We pay a real person to do it like they did in the golden age of gear. We do not have most of our work done in China only to do final assembly in America and then call it made in USA. We do not use surface mount components or ribbon cables that have been recently developed to shrink the size and build time of cell phones and computers. Instead we use time proven through hole audio components, discrete transistors, and large transformers just like they did in the golden age of gear.

At Chandler we are proud of our American made products and we hope you like them!

The Little Devil Pre uses a 100% discrete transistor circuit and specially wound transformers. Included are item descriptions and hints to get you on your way.

Please feel free to call our shop anytime for help or questions.

Prior to sending in your gear for repair, please contact our shop at the number listed below. We will assist you in troubleshooting the problem and, if needed, we will issue you a RMA# to send in the gear.

Send repairs to: Chandler Limited, Inc. Attention: Repairs 222 S. Cherry St. Shell Rock, IA 50670

Phone: (319) 885-4200 Email: support@chandlerlimited.com

Connections - All connections on the Devils are transformer balanced with pin 2 hot.



Current draw -

Here are the current draw specifications for the Little Devil Preamp when the Devil is loaded 600 ohm and operating at a continuous level of unity gain. Please consult your rack and PSU specifications to make sure you are not overloading your system.

+16 volt power rail = +95ma -16 volt power rail = -70ma



COMPATIBILTY-The Little Devil Pre is tested and proven to have no start up or power errors in these racks-

API 500v 10-slot with L200 PSU API 500-6B Lunchbox API 500-6B HC "new version" Lunchbox

BAE 11-slot with power one supply BAE 6-slot portable with power one supply BAE 6-slot with Avedis designed supply

Emperical Labs 2-slot (awesome rack and worth the money!) A-Designs 2-slot

Purple Sweet 10

As of the release of this product we have not yet tested with the Radial Workhorse.

POWER SUPPLY RECOMMENDATIONS-

With ANY 500 modules (not just the Devils) we recommend using a rack with external supply. We feel a power supply in such close proximity to the right hand slots of the rack can cause hum and noise floor issues with many modules by many manufacturers. For this reason we mainly recommend the API 500v rack with external L200 supply and the BAE 11-slot with external supply.

NOTES on BAE racks-

We recommend adding a wire from Earth to power supply common on all BAE racks. In many cases hum can be avoided and Earth to common is standard procedure on most electronic equipment.



GAIN - max gain 66.5



MIC/LINE- There are three different input types on the Devil 500. Mic/line switches between two of them - the transformer balanced mic or the line inputs. The Little Devil 500 pre is more than just a mic pre. It is processor. By switching to line input process any line level source such as tape or daw tracks, buss submixes or the complete stereo buss can be processed. For unbalanced sources such as bass and keyboards select the DI input.

LOW/HIGH- Selects low or high impedance for BOTH mic and line freq response.



FEEDBACK/BIAS-

How the feedback and bias works. Some users may be familiar with our Germanium pre amp which incorporated variable negative feedback in a pre amp for possibly the first time. On the Devil we wanted to take this a step further and allow you to change the bias of the gain stage AT THE SAME TIME as the feedback.

So what does this mean?

Well you can modify about any parameter of the sound of the pre with the use of the feedback/bias control. It will change the frequency response in the hi and low areas, harmonic distortion, nature of clipping, and the overall tonal characteristic of the pre amp. For example with the feedback on full the sound gets "gushy" as users have described. The unit will soft clip much earlier, harmonics increase exponentially, hi frequency is slightly increased and the unit takes on a very high voltage "overbiased" Class A personality.

With the feedback control low you get a very colored but more "tame" sound. Harmonics are very low (in the range of .007%) and noise is the lowest possible with the unit, in the area of -93db. The sound could be described as an accurate but interestingly colored Class A sound.

With the Feedback/Gain near the middle of its operation you will get the most headroom and what could be considered the most typical operation of a mic pre. All parameters tend to come into the norm for a Class A style mic pre, BUT don't let that keep you from using it set there! The pre always has a great colored sound we all look for!

Feedback continued on next page...



NOTES ON FEEDBACK-

With the feedback all the way down you will not get much level. This is the nature of feedback. Lots of feedback = very little gain. I wanted it like that because there are very specific sounds you can get with it. For example, with lots of feedback (control off or counter clockwise) you get very little distortion and the noise floor is very low. It also allows you to use the pre with almost no gain for when you are recording loud sources like drums and guitar.

Control off or counter clockwise- Lots of feedback, Little gain. Control full or clockwise- Very little feedback, lots of gain.



OUTPUT-

Acts as a fader on a mixing console and is used to trim the signal of the pre or when you want to experiment with driving the input signal to varying degrees. On all mic pres with this feature, headroom of the pre is decreased as you lower the signal but with the added benefit of a lower noise floor. The Devil pre loves to be driven so try this out!

BRIGHT-

DI-



Increases high frequency information on the output transformer by lessoning dampening. It's interesting to note that the pre amp was originally designed with the Bright in until it was decided that it may be too bright for continuous operation.

LOW CUT-

Gently sloping low cut at 100hz. We tuned this to work as needed with instruments such as acoustic guitar and voice.



Unbalanced direct input for guitar, bass, keyboards etc. Plugging in here bypasses the input transformer and jumps directly into the Class A input of the pre amp. We chose to do this on many or our products because the tone is so

much different than that on readily available direct boxes. Please note that it is possible to make the DI oscillate with the Gain and Feedback/Bias at or near maximum. We did not compensate for this because it would alter the overall tone of the pre amp. In standard Mic or Line input it is not possible to cause oscillation.

PHASE 48V-

Yep its 48 volt phantom power....

PHASE-

Reverses the output polarity of the unit at the output transformer.



