### Little Labs

IVOG
ANALOG BASS
RESONANCE TOOL

OPERATORS MANUAL

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#### THE I-VOG IN USE

The iVog will sweep a sharp, very high Q resonance peak from 20 to 300 Hz, with everything below the peak swept away at up to 24dB per octave. This allows you to accentuate, for example, on a kick drum, the fundamental, the subharmonic, or the upper harmonics. It actually sounds like you are loosening or tightening the drum head. The max peak amplitude at the center frequency is as high as 18 dB. The potentiometer we have to use for the amplitude in the iVog has to have an extreme log taper. In use, I usually have that amplitude knob fully clockwise to listen for the frequency I want to focus on, I taper it off for more subtle accents.

The amplitude knob fully counterclockwise is the same as the flat button in the depressed position.

Due to the low-frequency nature of this beast, some scratchy noises will be heard when adjusting both amplitude and frequency; this is normal.

One of the beauties of the iVog is the extreme cut-off below the peak frequency; even in its lowest frequency position, which is about 20 Hz, the frequencies below it are wiped out. This should reduce the possibility of launching woofers out of their baskets, but don't get carried away; you still could overload some systems.

#### **Important Tech stuff:**

The iVog is unity gain on the balanced XLR i/o and TRS i/o. The iVog has 10dB of gain on the instrument input. Input impedance on XLR and TRS i/o: 10k ohms Input impedance on the instrument input: 3.32 meg ohms

**Output impedance: 100 ohms** 

Max level: out in balanced mono: 28dB Max level: out in unbalanced stereo: 22dB Congratulations on your purchase of the iVog analog bass resonance tool. The Vog came first, designed for the API-500 series rack format. The iVog was made for those folks without a 500 series rack and who wanted an instrument input.

The Vog and iVOG resulted from my fascination with design errors in circuits and transformers that malfunctioned with mostly useless but sometimes incredible results. For example, in winding step-up transformers, we occasionally would find a notch in the frequency response of one that was so incredibly deep and narrow. Designing such a notch filter would be very complex, and who thought you could do it with a design error in a winding? The iVog was similarly discovered in my laboratory but has, as you will hear, very useful and very musical capabilities.

My initial application for the Vog was for voice-over work. It allowed you to capture the lowest tone of your voice and accentuate that while simultaneously completely rolling off the mush below it. Similar to a proximity effect but with higher intelligibility. That's where the name Voice of God came from. Only later, however, when I heard it on a kick drum and a bass, did I realize I was really onto something here!

The Vog and iVog give you unprecedented bass resonance control that is quick and easy to apply. It can be way over the top or subtle in its effect. It does not generate a lower octave as some devices do, it only can work on what's already there, but it doesn't need much. The minimum processing is what makes it sound so good.

One last thing, the instrument input added on the iVog was a natural because of the internal high-impedance nature of the VOG. The VOG's internal amp has 10dB of gain and a 3.32 megohm input impedance. It should be easy to get some very interesting results, especially on passive pick-ups—experiment for the best results.

So have fun; the I-vog is easy to use. Please don't be afraid to push all the buttons and have fun creating the biggest beautiful bottom you have ever heard.

Cheers!

Jonathan Little

#### <u>I-VOG</u> IMPORTANT HOOK UP INFO

Use only the supplied bi-polar 16.5-volt inPhase power supply to power the iVog. The inPhase supplies are "global" and can be plugged into 100-240v AC 50 or 60hz. On older supplies labeled APS, you have a switch that you must set for either 110v or 220v operation. Failing to set it to 220v where needed will destroy the supply and possibly the iVOG, and not setting it to 110v where needed will make the iVog sound bad.

The iVog is a balanced device for om input to output. Unlike some devices that unbalance the signal when it enters, then balance it when it leaves, the iVog never unbalances the signal. What happens to the positive happens to the negative; it's a differential circuit from input to output. This circuit topology has major sonic advantages, but you must keep this in mind when the unbalanced gear is used with the iVog. The input isn't critical; you can drive it with a balanced or unbalanced signal. The output, though, be careful; many people have unbalanced inputs wired with pin three and pin one tied together (with pin two hot). If you do that, you will drive pin three output into the ground. It won't blow anything up, but it can cause general weirdness. You need to not attach pin 3, but, of course, keep pin one attached. Balanced, though, is the way to go.

Here is a secret, you can use the iVog in STEREO, mind you, you don't have separate left and right controls, but I use it on my DJ setup sometimes. Kick it in on some tunes to get the dance floor pumping. Simply wire pin one ground, pin two left, and pin three right on the XLR. Using the TRS jacks, you can easily use (what is called) insert cables for stereo i/o; tip left, ring right. When using the instrument with a typical mono instrument with the iVog wired for stereo, you will hear it on the left side (or xlr pin two, TRS tip).

# IVOG FREQUENCY SELECT BUTTONS

The frequency select buttons on the iVog selects where your peak resonance will be when the frequency knob is at the center position, the number 5. So here is how they work:

With the flat button in, the signal has a flat frequency response (this is not a hard bypass).

With all buttons out, the center frequency is 40hz. With just the 100 button in the center frequency is 100hz. With the 100 and 40 button in, the center frequency is 200hz. With just the 40 button in the center frequency is 40 Hz. (just the same as having all buttons out)

My buddy Joe Barresi wanted me only to have a 40 and 100 position. I added the 200 position, I kept it in there and now he uses 200 Hz all the time! Ha Ha! Oh, and note, if it's not already obvious using your ~EARS~, the higher you go with the numbers on the frequency dial, the lower the peak frequency.