

# Little Labs IBP Junior, Multi Z PIP 3.0

Yes, it's true that most Little Labs products are little boxes, but they're actually named after imaginative electronics genius, founder and designer Jonathan Little. **GEORGE SHILLING** reports on two.

**T**HE FIRST THING YOU notice about these units is the high quality of the build and the fact that the included power supplies are bigger and heavier than the units they power! Power supplied is around 48V and thick power leads connect to the units using four-pin plugs secured with a ring clamp, which bodes well.

Phase differences between mics or a mic and a DIed signal are a constant source of frustration for engineers. Sometimes, flipping the polarity button on the mic pre of one of the signals will improve the tone when these are combined, but it is rarely possible to get mic and DI completely 'in phase'. You can change phase relationships by moving the mic around, but you might not end up in the best sounding position, so this can be something of a compromise. You might move the files around to line up in your DAW for a closer phase relationship, but you cannot compensate for phase response errors caused by EQ or cabinet or mic phase response.



The IBP Junior (UK £218+VAT) is an 'analogue phase alignment tool' that uses a pair of all-pass filters to shift the phase of the signal passing through with a simple variable knob. Alongside the rear power connector are a male and female XLR allowing you to insert the box on one signal. A green LED glows on the front, there is one well-damped knob and four buttons — it's simple. With all the buttons out and the knob hard left, no phase shift occurs. The first button bypasses the phase shift knob. The second button is Phase Invert, much like that found on the console or mic preamp — pressing it in shifts the phase 180 degrees. The third button selects between a 90-degree range of adjustment or a 180-degree range for more extreme shifts with the knob. The fourth button switches between a higher bandwidth phase adjust and a primarily lower frequency phase adjust, and this, in combination with the knob provides the phase curve.

This last button does not always change the sound dramatically, but can be useful in situations where the tonal balance changes across the frequency range. With the aforementioned mic/DI scenario, much fun can be had tweaking with the unit while setting up to record, sweeping around to reveal dramatic tonal changes when the two signals are monitored

at similar levels. Of course, there is not always one obvious setting — some unusual tones can be achieved on guitars shifting the phase of one of your two or more mics, and with multi-miked drums the possibilities are almost endless.

But with bass guitar an immensely more satisfying blend is quickly achieved. Of course you can always use the IBP while mixing to correct problems rather than at recording. The 'Junior' part of the name reflects the parentage — the original IBP additionally includes an instrument DI input and a 'Re-amp' output. Phase sweeping quickly becomes addictive, and this is a unique, erm, little box.

The Multi Z PIP (professional instrument preamp) is a very versatile problem-solving box that includes high quality solutions for impedance matching in various situations (UK £375+VAT). The front panel includes Instrument input, a Level knob, and the circuit selector, a rotary knob to switch Hi, Mid or Low Z, plus a Speaker setting. Three earth lift toggles are provided for the input and two of the outputs. There are also overload LEDs.

The rear connections are an XLR main output, along with no less than six jack sockets. The word 'Custom' also appears three times on the rear, referring to configurable internal jumpers to change the nature of those connections.

First, this is a very classy sounding DI box. The different input impedances allow for passive or active guitars using the high and mid z settings,



with the low setting useful for keyboards (with the least amount of active circuitry in the signal path). The Speaker setting attenuates the input by 30dB — there is no speaker soak or simulation here, nor a speaker output, but this is useful for running an amp straight into the console and capturing a performance with all the amp settings intact. You can send the resulting signal to a low-distortion amp for acquiring some natural speaker/room characteristics later using the Re-amp circuit which converts line signals to instrument level Hi Z, and functions completely independently of the main DI circuit.

Usefully, a Re-amp level trim pot is provided on the

rear. With this circuit, you can send any recorded (DI) source to a guitar/bass amplifier. Using both circuits, guitar stomp boxes can be sent from and returned to a pro mixer or DAW. This worked beautifully, opening up a truly exciting world of possibilities with my collection of old pedals. Turning this concept on its head, the 'Balanced only expansion out' enables you to insert pro gear between guitar and amp. Fabulous. And sending one guitar to two amps is easy; you can use the volume pot for one of them.

Also among the rear panel jack sockets is a Summing Amp input to blend another signal with the main DI input. Over time, Little has been asked to provide various custom versions of this box, and has therefore included a sprinkling of internal jumpers for different configurations. These include turning the buffered out into a volume pedal insert, changing the Instrument Thru into the main in or an additional summing input, or making the XLR transformer isolated and pre or post the gain pot, or transformerless (and many more!) If you can find the right Allen-key to dismantle the box, the possibilities offered by these features are immense and the audio quality of this unit is unassailable. ■

**PROS** Handsome construction; sonic integrity; unique functionality.

**CONS** Indispensability; tiny legending; PIP manual confusing.

**EXTRAS** Little Labs in conjunction with Mercenary Audio have introduced the Signal Transmission Device, a guitar/instrument cord line driver. The STD allows you to use long microphone cables or microphone tie lines to extend your guitar or any instrument cable without the loss of tone and increase of noise associated with long instrument cable runs. It also has two outputs for splitting between two amps or between an amp and a direct injection box, with a selectable ground lift on one output to eliminate ground loop problems.



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