## PGV quick start guide

How to set up the PGV for the first time:

- Connect the guitar to the  $\frac{1}{4}$  jack on the right side.

- Connect the guitar amplifier or your preferred output to the left side "out" ¼" jack.

- Connect a 9V voltage source to the jack at the left side. Use a center negative power supply.

- Now the green "parametric" led, the red "noise" led, and the red bypass led should be lit. If the bypass led is dark, push the bypass footswitch once. Check that the volume knob on your guitar is at maximum.

- Keep the "spectrum hold" and "transpose -1 octave" switches at the "off" positions for now.

- Turn the "modulation", "noise", "noise gate", "mic gain", and "vibrato" knobs to zero.

- Turn the "pilot gain" knob to maximum.

- Now play the guitar and adjust the main volume knob at the center to a comfortable setting. At this point you'll hear a simple pilot signal that helps you adjust the settings and tune the guitar. If you want to add some character to the pilot signal, adjust the "modulation" knob. We achieved the best results with neck position humbuckers as opposed to single coil pickups.

- Adjust the "threshold" knob: The guitar capture sensitivity increases when turning it counter clockwise (CCW). Try to find an optimum position so that all the guitar strings can be easily heard, but not too far CCW to prevent noise or unwanted notes.

- Connect an expression pedal to the ¼" jack on the left side. Use a pedal which has the control voltage output at the tip and pedal input voltage at the ring connection (e.g. in the M-audio EX-P pedal the bottom switch should be set to "M-Audio").

- Test the pedal: the selected special effect is still "noise", so now you can adjust the output noise with the pedal. Pushing the "effect select" footswitch you can change the effect that the pedal activates. Check their details in the separate manual document, as well as the two different vocoder operating modes.

Now you can test the actual vocoder operation:

- Connect a dynamic microphone to the XLR connector on the right side.
- Turn the "spectrum shift" knob to its center position.
- Turn "pilot gain" off.

- Sing into the microphone when playing the guitar; adjust "mic gain" to get a comfortable output level. Observe the "guitar" and "mic" compressor leds: when they turn green, the compressor limits the corresponding input signal amplitudes (but does not yet distort them).

- Try to adjust the "spectrum shift" knob for different timbres; for testing of the different adjustments it may be convenient to momentarily freeze the voice spectrum: turn the "spectrum hold" switch on, and adjust "noise gate" knob a little clockwise. It sets the low threhold for the holding.

## Direct vocoder mode

When the "effect select" footswitch is applied 4 times, the vocoder switches to the traditional, non-parametric mode, here called "direct mode". Now there are less possible active controls:

- "pilot gain" now controls the guitar gain; there is no compressor for guitar, only for the vocal microphone, therefore you need to adjust the "pilot gain" low enough to prevent clipping that is shown by the "guitar" led turning red.

- "threshold" now controls a high pass filter corner frequency.

- the controls "spectrum shift", and "spectrum hold" with the "noise gate" will still work.

