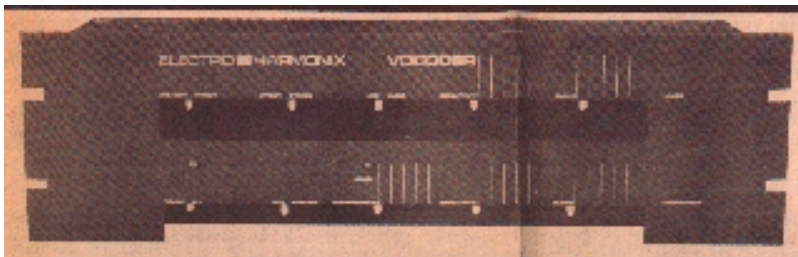


Elek. Harmonix

Elektro Harmonix Vocoder

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'Road Test' vocoders part 3 By PHIL JONES checks out Elektro Harmonix



A NAME that crops up more and more often on the effects scene is Electro Harmonix, and it's not going to make you fall of your chair if I tell you that they, too, market a vocoder. In fact, the E-H vocoder is the smallest, and least complicated of the six machines I have looked at for this survey and represents a functional, 'minimum frills' approach to the subject.

This particular vocoder is, I think, primarily intended to be rackmounted, a deduction arrived at by the appearance of the 19in front panel with pre-drilled flanges, but is also quite happy to be free-standing on the rubber feet fitted. The controls are mounted on the top surfaces of two horizontal slots cut into the front plate, a novel and innovatory way of going about things, but I have to admit I found them not very ergonomic and somehow psychologically uncomfortable to operate - partly due to the mounting and partly because of the small switch toggles and slider knobs - but I appreciate the underlying concept of un-accidentally nudged controls. Keep working on it, chaps.

Fourteen filter bands are utilised by this particular device (this being the least number I've found so far on my travels) but the intervals between each band are comparatively small - around a quarter-octave - and have been carefully selected to provide the best effect with this limited number of bands. Taking into account the fact that there is no sibilant sensing circuitry, the resultant vocoded output is of surprisingly good quality, despite the apparent narrow spectral range being used.

Panel controls are at a minimum for ease of operation and are roughly divided into two groups - music (carrier) and microphone (program) - although general controls have been placed wherever there was room, thus maintaining the quintessential symmetry of form and colour one has to expect in these neotechnological times. Along the bottom row we have on/off switch with LED, hi-boost switch useful for compensating for certain microphone configurations where a lot of top disappears, plus microphone sensitivity, blend and compression controls. The sensitivity control is pretty self-explanatory and unambiguous but maybe the others need a little more in-depth coverage. The compression control allows the dynamic range - if you like the range of volumes from silence to sudden very loud noises, eg a handclap close to the mike - of the incoming signal to be limited. This can be imagined as a sort of level control which only works above a certain volume, this volume being determined by the compression slider control. Thus, normal levels of speech will be unaffected whereas sudden peaks of sound will be attenuated or 'compressed' into a narrower dynamic window - or to put it another way, loud noises are made not so loud. Why didn't I say that in the first place? The blend control simply allows a variable amount of the original mike signal to be mixed with the vocoded output for greater clarity of speech or even to allow duets to be created between the normal voice and the vocoded one, a rather effective trick.

Along the top row, we find a standby switch which is to be used in preference to the on/off switch should you wish to dispense with the services of the vocoder at any time (if you use the on/off switch you may find a few treble horn driver diaphragms on the floor afterwards - expensive). Alongside the standby switch is a bypass switch used for shorting out the vocoder signal and directly routing one of the input signals (as determined by a mike/music selector provided) through to the vocoder output. Lastly in the way of controls there is a music sensitivity slider (fairly obvious) and a music blend slider. The music blend is not quite the same as the microphone blend control, however, as this slider determines the level of the carrier signal to be passed directly to the vocoder output when there is no program input, thus providing a straight music fill during the pauses between vocoded (ie a microphone signal is present) phrases. The sensing of these pauses is entirely automatic. All input and output sockets are of the usual 1/4in jack type and are to be found on the back panel. Inputs are for mike and music, both being extremely flexible, accepting practically anything you decide to plug in them. As well as the normal vocoder output, the unaltered mike and music signals are also output. This is so that the vocoder can be inserted serially between a mike and a synth and, say, a mixer without requiring cables to be spliced and all that jazz. The vocoder can be plugged in in-between somewhere and not provide any wiring complications - good thinking. The only other socket is for a foot switch to allow remote-control of the bypass function.

For its size and price, the Electro-Harmonix vocoder is a great little beast for beginners and professionals alike, although I dare say that a lot of studios etc would prefer to have something a bit more flexible. I found it simple to operate with no particular quirks or peculiarities. It's solidly built but I didn't go much on the quality of the sliders. The only real criticisms I had were firstly with the un-ergonomicness of the panel controls which I mentioned earlier and the fact that I had a certain amount of music breakthrough presumably due to a slight maladjustment of the music blend circuitry, but that's probably pretty easy to fix.

SPEC: Electro Harmonix Vocoder Price £428 inc 15% VAT. Analyser/synth 14 bands fixed follower routing. Inputs Mike (47K), music (47K), foot switch. Outputs: Mike (+6dB), music (+35dB, Vocoder (150 ohm with 14dB h'room). Controls: on/off switch (with LED), standby/effect, effect/ bypass, mike/music bypass selector, music sensitivity, music blend (for pause filling). hi-boost on/off, mike compression (with overload LED) mike sensitivity mike blend. Dimensions 19in wide 5 1/4in high, 5 1/2 deep. Distributor Electro Harmonix Unit F24 Parkhill Trading Estate Martell Road Dulwich London SE20 (01-761 3739). Guarantee: 2 years parts and labour.