

Korg VC 10

KORG VC-10 VOCODER

Dropbox

Published in Melody Maker

Vocoders Part 4 Korg VC-10 by Phil Jones



The Korg Philosophy towards vocoders is plain from the outset with only a quick squint at their actual contribution to the scene. It can be summed up as completeness; no external bits and pieces are required - with the possible exception of an amp, and even that's not needed if you have some headphones.

This is due to the fact that the VC-10 is a stand-alone device with built-in carrier sources as well as a built-on program source in the form of a goose-neck mike. So basically all you have to do to play it is to take it out of its box and make with the volts, man...

Incidentally, for those of you who have difficulty distinguishing between things, this is the VC-10 without the Rolls-Royce engines - now down to business. Program material can be input either via the goose-neck mike mounted on the top of the cabinet with a BTS connector or alternatively through a standard jack socket provided to allow other mikes to be used.

On the other hand carrier information can either be input from an external source such as a synth or guitar, or can be produced internally by the keyboard electronics provided. This is basically a tw'o-and-a-half octave polyphonic 'board spanning F to C, producing a sawtooth output. The frequencies corresponding to each key are simply gated (switched on and off) by the depression of the appropriate key.

The keyboard is nominally pitched in the 16' range but with the flick of a switch found on the front of the unit the scale can be raised an octave to the 8' range, so giving a total keyboard compass of three-and-a-half octaves. The keyboard can be tuned by ca. half an octave thus allowing the vocoder to be tuned to the pitch of other instruments, although other ways of altering the pitch are available. For

instance, to the left of the keyboard is a pitch bend wheel having a range of ca. an octave - at least, it did on the unit I had, even if the manual (which isn't up to the usual high standard one has come to expect from Korg) says it should only be ca. half an octave... my brain hurts.

This wheel is particularly useful for injecting intonation into the carrier signal derived from the keyboard, and thus into the output simulating the sort of expressive pitch fluctuations associated with human maunderings. Similarly, the pitch can be bent using a pedal and although a pedal isn't provided, a socket for plugging it in is. Vibrato can also be invoked at will and rate and depth controls are provided for that very reason.

Last in the seemingly never-ending list of modulatory things is a knob bearing the mysterious legend 'accent bend'. No, it doesn't make you sound French, nor does it help you impersonate Benny from Crossroads. What it does do is to make the carrier pitch from the keyboard 'wobble' in an unpredictable sort of way thus aiding in the simulation of the human voice; the further you turn the knob the 'wobblier' things get, the most clockwise position resulting in what we technical writers call a 'bloody wobbly situation'.

The analyser in the VC-10 utilizes a twenty filter arrangement, and the envelope follower outputs are hard-wired in the 'normal' way to the VCA's of the corresponding frequency band. This configuration cannot, externally, be altered - unless you're prepared to warm up yer soldering iron and invalidate yer guarantee.

Should external program and carrier signals be used, their levels can be adjusted to suit requirements with two pots on the main panel and either can be displayed on the VU meter for visual confirmation.

Unlike many other vocoders, the VC-10 has no voiced/unvoiced detector - a fact which has a lot to do with the reasonable asking price, I dare say - although from a technical point of view I think I'd rather pay more and have one included. However, a noise generator is included and its output can be mixed with or substituted for the usual carrier signals.

That about covers all input considerations, now let's look at output facilities. The 'vocoded signal can be mixed with the original vocal input, or indeed the normal voice input can be routed straight through without change. The combined signal can then, if desired, be 'enssembled' using the on-board delay to provide some spacial fill and movement.

No automatic 'pause stuffing' is available on the VC-10 (another reason for the ongoing inexpensivity) but with a bit of practice and a few swell pedals you can usually find a way around this situation.

Lastly, the output from the ensemble circuitry is controlled level-wise by a combined volume/onoff switch for line level signals to amps, mixers etc but a separate phones output is provided for monitoring and this has its own level pot. Although not an outwardly complex device, the VC-10 performs adequately despite its lack of some of the more cormoon facilities found on other vocoders. It's a unit that will appeal to those wanting to include a vocoder in their gear without complicating the wiring up procedures too much for the roadies. Results are generally good if a little bland and flat, but the simplicity of operation will attract first-timers, particularly those considering live work to which the VC-10 is well suited. I did however find the gooseneck a bit short - maybe I shouldn't be so tall...

SPEC: Korg VC-10 vocoder. Price: &#pound835 incl 15% VAT Distributors: Rose Morris Ltd, 32 Gordon House Rd, London NW5, telephone 01-2675151.

Analyst/vocoder: 20 band Program inputs: BTS and jack, miclevel control Carrier inputs: keyboard 32-note F-C with octave switch (normal 16' up 8'), tuning (ca. 100 cents), accent bend, vilbrato speed and depth, external pitch control pitch control and input, pitch control wheel (ca. 1/2 octave), signal/noise mix control, external carrier level control and input Final control: ensemble switch, output balance (vocoder/mic), volume/on-off control with socket. Consumption: 20W.

Dimensions: 499(W) x 309(D) x 249(H) mm. Weight: 7Kg. Guarantee: one year parts and labour.