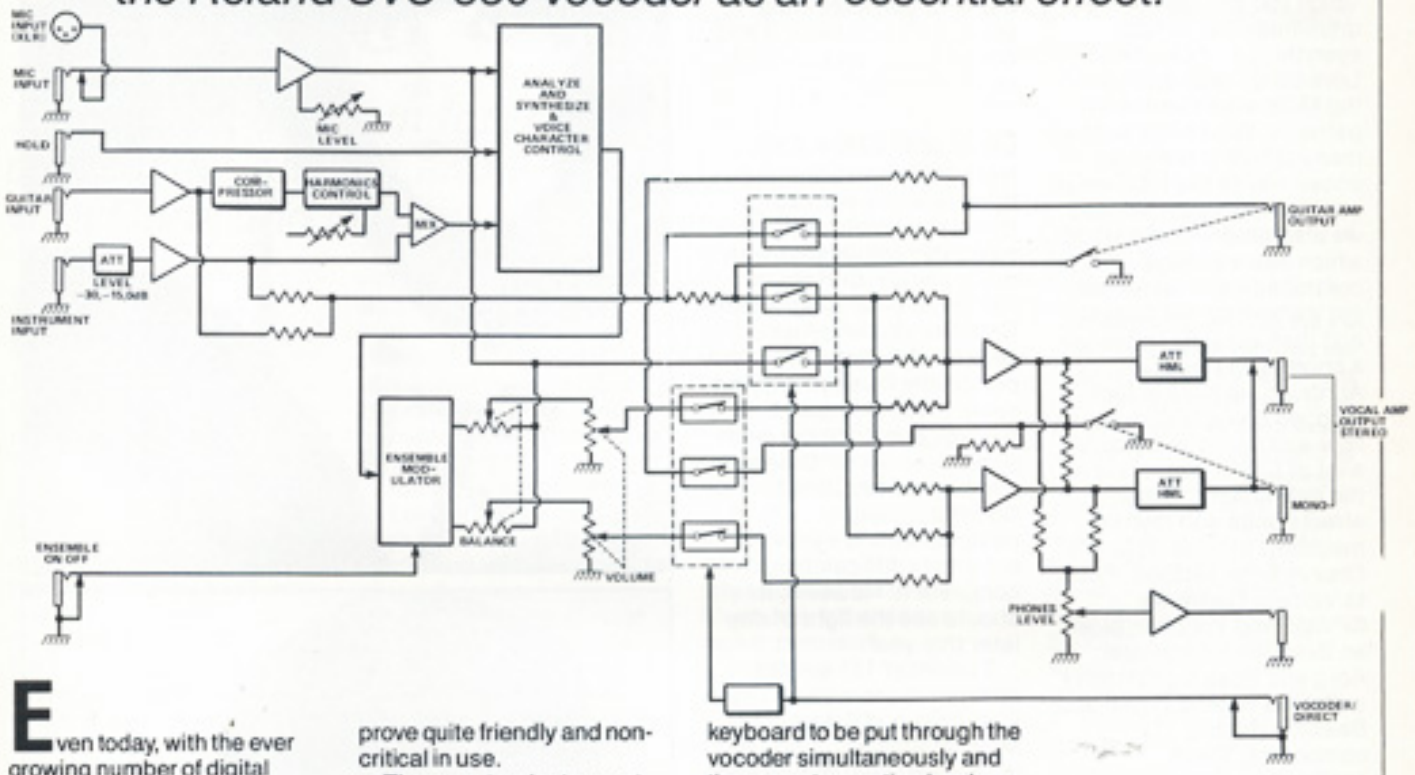
Review

Roland SVC-350 Vocoder

Continuing the Home Studio theme, Martin Sheehan assesses the Roland SVC-350 Vocoder as an essential effect.



Even today, with the ever growing number of digital effects and sampling paraphernalia, there are only a handful of vocoders available on the market. For those who have not sampled the delights of these wonderful creatures, a vocoder, in its most basic form can take an input from a voice and give its character to a second musical input whose pitch dictates the output pitch of the voice. In other words it can make an instrument sing. The Roland SVC-350 performs this basic function with admirable ease and adds delightful touches of its own.

Artistic Flair

Constructed to the usual high standard of Roland equipment, the unit is 19-inch rack mountable and also has it's own feet for free-standing use. Microphone input is via standard ¼ inch jack or XLR socket, both are provided. A rotary pot controls the input level adjustment with green and red LEDs indicating correct operating level and overload respectively. The working dynamic range of this and the instrument inputs prove quite friendly and non-critical in use.

There are two instrument inputs; the first is called "instrument" and is for signals of limited dynamic range such as keyboards. Its level is switchable at −30, −15 and 0dB with fine adjustment being made at source. the second is called "guitar" and can take signals of widely varying dynamic range. Its circuit contains what can only be described as a masterpiece of compressors. In use this input will take the heaviest strum and operate on it steadily until the last faint vibration of the strings, without the slightest complaint. I was even able to use this input to take an output from a tape recorder and vocode a backing track complete with bass and drums. There is also a harmonics attenuator control on the guitar input which is used to adjust the brightness of the sound and to keep unwanted harmonics from creating dissonants on chord work. Each of these two inputs has its own red overload LED and they share a common green LED. This arrangement allows both a guitar and a keyboard to be put through the vocoder simultaneously and the correct operating level can still be maintained.

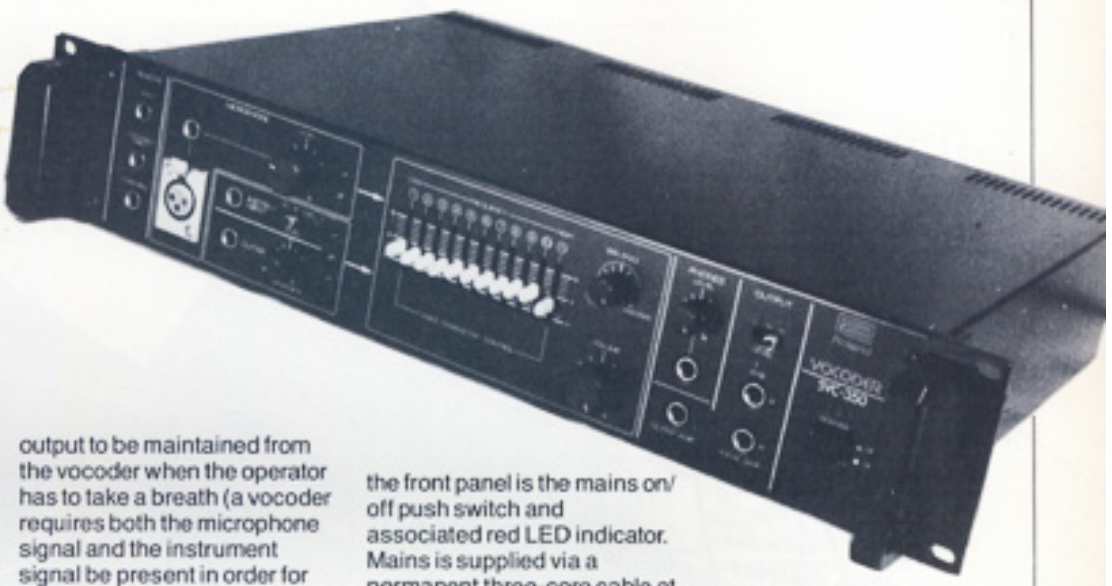
Character Building

These inputs now feed the voice character control section which appears as a bank of 11 sliders. Each of these sliders has control over a specific frequency band. The intelligibility of the vocoding can be refined from this section and the overall output frequency shape modified. Also on this part of the front panel is the vocoder volume control and an overall balance control variable between direct microphone output and vocoder-only output. It is possible to mix the original voice with the vocoded signal at this point and, in effect, sing harmonies with yourself, by singing the melody line whilst playing a harmony line. The resultant output will be you singing the melody, accompanied by your guitar or keyboard singing in harmony. With the facility for two instruments to be vocoded at the same time, using this technique you can be well on your way to 'the barber-shop'.

Seas Of Sockets

The SVC-350 has an output for every occasion, all via standard ¼ inch jacks. There is a stereo headphone output with its own level control. A guitar amp output and a pair of vocal amp outputs which can be used in mono or stereo. There is a 3-way high, medium or low output selector switch associated with these. Running back to the far left of the front panel there are three ¼ inch standard jack sockets to take foot-switches. The one labelled "vocoder/direct" is associated with routing different combinations of signals to the various outputs previously mentioned. As well as an *output* for every occasion there is also an *output routing* for every occasion. When used with a guitar amp alone (in vocoder mode), only the balance between the vocoder and direct microphone will be output. In direct mode only the

guitar or instrument will be heard. Using just the vocal amp outputs in mono or stereo (in vocoder mode), the output will be the same as for guitar amp only, but in direct mode the direct microphone sound will be heard as well as the guitar or instrument. When both guitar amp and vocal amp outputs are used together, in vocoder mode, there will be the vocoder/direct microphone balance evident at the vocal amp and no ouptut at the guitar amp. In direct mode there will be the direct microphone at the vocal amp and the guitar or instrument at the guitar amp. This admirably sensible set of arrangements makes the Roland SVC-350 just as much at home on stage as in the studio.



Remote Possibility

The vocoder/direct footswitch socket is one of three situated in a section on the front panel labelled "Remote". The other two sockets are called "hold" and "ensemble". The "hold" facility is designed to be oeprated by a momentary foot-switch. When this is depressed the circuitry will hold the last sound generated in the microphone section. The instrument signal will continue to be processed by this fixed sound until the foot-switch is released. The use of this facility enables a continuous output to be maintained from the vocoder when the operator has to take a breath (a vocoder requires both the microphone signal and the instrument signal be present in order for an output to be generated, if either are missing there will simply be no output). The "hold" can also be used to give an impression of a continuous "ahh" sound as if sung by a choir, with the operator only being required to give an initial brief "ahh" and then hitting the foot-switch. You can of course substitute any other vocal sound for the "ahh". The last of these foot-switch sockets is "ensemble". This is what gives the SVC-350 its stereo effect. It is the distinctive chorus effect split into stereo, and this particular Roland version really gives an impression of size.

The only remaining item on the front panel is the mains on/off push switch and associated red LED indicator. Mains is supplied via a permanent three-core cable at the back. There is, however, a separate ground terminal for making common ground connections with other equipment.

It's A Bargain

The Roland SVC-350 Vocoder is a very high quality piece of signal processing equipment. Its fairly non-critical input requirements make it enjoyably user-friendly, especially for live situations where there is not time to be continually checking levels. It's guitar circuit compressor is a masterpiece, enabling complete control of dynamics to be governed by the voice, almost regardless of what the guitar is doing. Intelligibility is very high, aided by Roland's special high slew rate filter which can respond to the rapid transients of hard consonants such as 's' and 't'. The "ensemble" effect is nothing short of ethereal and will enhance many a poor quality input signal. The SVC-350 is supplied complete with a double foot-switch for operating the vocoder/direct and ensemble modes. A jack-to-phono lead with phono-to-jack adapting plug is also provided as standard. As already stated, there are only a handful of vocoders on the market and although the SVC-350 is not the cheapest, it is a long way from being the most expensive. When you consider that, its retail price is around the £600 mark, it is in a niche of its own where value for money is concerned. For your money you are getting a very professional and versatile piece of equipment. It is capable of far more than the typical choir-like sounds that are generally associated with a vocoder and its capabilities are still a long way from having been fully exploited commercially.

If you are looking for new and unusual sounds the SVC-350 is to be thoroughly recommended. If, on the other hand, you just cannot sing for toffee you could seriously consider using one to get the sort of vocal expression into your music that your lack of pitch has prohibited you from doing in the past. ■

