

TC/Helicon VoicePrism

TC Electronic and Helicon have joined forces to produce this vocal formant pitch processor. Konrad Skirlis voices his opinion.

With so many 'new' effects units offering no more than a not-too-subtle repackaging of previous units, it's refreshing to come across a product that concentrates solely on the voice. Those of you familiar with the Digitech Vocalist (and a number of other vocal-

when I understood how to really get in and control its parameters did I fully appreciate the awesome power of this processor. So a word to the wise here... the Voice-Prism rewards those who put some time into understanding it.



Layout

The layout of the Voice-Prism is fairly straightforward, but it can be a little too menu-driven for my liking. This is not necessarily a criticism, TC/Helicon have simply packed a lot into this 2U rack-mount box. Apart from gender

oriented products) will know of a Canadian company called IVL. Helicon is ostensibly another incarnation of IVL and their voice processing prowess. Meanwhile, TC Electronic needs no introduction. Anyone familiar with their products knows they are held in high regard in the audio profession. With these two parts of the equation in place – TC's manufacturing and effects expertise along with IVL's background in voice research harmony generation – the VoicePrism was always going to be an appealing prospect.

First Impressions

Out of the box, the VoicePrism's host of presets can't help but impress – transforming the plainest of voices to something special. However, when I received the review unit, many of the factory voices seemed to have an inherent detuned quality about them. Other factory presets exhibited sonic artefacts that didn't seem to properly track singing parts. I felt a little like a kid in a candy store, only I couldn't reach the sweets. Fortunately, the Voice Prism's distributors allowed me to hold on to this unit a little longer than originally planned. Only

related four-part harmonies, the VoicePrism performs compression, gating and EQ by separating the signal into lead voice and harmony effect channels. Furthermore, signals can be independently channelled into typical voice effects, such as delay (including tape delay), reverb, chorus and flange. Although parameter control is limited, the effects are good enough to use on their own. A clever feature is the Aux In connection, which allows an external audio line into the effects blocks to be mixed with vocals. The Preset screen indicates important parameters at a glance. However, not everything on display is intuitive to the first-time user and referring to the manual is a must!

The data wheel in the centre of the front panel allows adjustment of the parameters within each operating mode and assists with editing when used in conjunction with the four soft knobs under the LCD screen. The left/right menu tab toggles through the different operating modes. A group of buttons to the right include a global bypass for disabling all VoicePrism sounds. Meanwhile, 'Harmony' turns only harmonies on or off without affecting the rest of the mix; the 'Utility' screen allows editing of Midi parameters and footswitch configuration,

'Help' brings up a context-related LCD screen display (use the data wheel to scroll through an entire help message), '48V' and 'Mic' allow use with a live microphone. 'Store' will allow you to save and rename your own personalised settings. 'Preview' plays an in-built demo as dry and effected VoicePrism sequences. In fact, this is the best place to start for newcomers who want a taste of what the VoicePrism can do.

As far as the ins and outs go: on the front panel you'll find a XLR balanced mic input and TRS balanced jacks inputs on the back. The A/D conversion is at 24 bits and has a quoted 100dB of dynamic range. The VoicePrism ships as standard with a coaxial S/PDIF output (at 44.1k with full 24-bit wordlength) – handy for recording digitally directly to your HD recorder or DAT. Additionally the VoicePrism has TRS balanced outputs. The headphone or analogue outputs allow for simultaneous monitoring. For more I/O, TC/Helicon offers a 44.1k/48k (AES/EBU, S/PDIF) digital board.

Presets & Editing

Each of the factory presets are unambiguously targeted to a certain application, and named accordingly. However, the heavy reliance on the parameter menus will again have you reaching for the manual. For changing the factory presets, the VoicePrism will make more sense to users if they possess at least a basic understanding of musical scales and chords. Knowing the key of the song will help with relative pitching as these parameters are key features within the harmony section of vocal parameters.

To simplify the categorisation of parameter editing, five dedicated buttons take you directly to multi-page edit menus that allow the adjustment of the five main categories of VoicePrism control. In short, these are categorised as Vocals (for editing vocal parameters); Effects (for the two separate post effects available); Comp/EQ (compressor, gate and EQ settings, where dual parametric equalisers can be assigned to the lead channel, the harmony channel or both); Mix (lets you adjust levels within a particular preset); and Step (allows you to move through a pre-organised set of presets one step at a time, manually or via footswitch). I found these five buttons to be particularly handy, as they allowed direct access to the changes I wanted to make. Once selected, the four soft knob controls under the LCD screen allowed for the selection and editing of individual variables.

TC/Helicon have certainly packed a lot of vocal processing into this box, so much so that there's little room for certain visual indicators – for example, the compressor settings do not indicate gain reduction level, nor is there a visual indication of compressor responsiveness in the form of attack and release. While the VoicePrism offers a quality mic preamp, do not expect to score an extra high quality compressor by purchasing this unit. Compared to a mid-priced outboard unit, the TC/Helicon compressor does not match up in the area. This is surprising to me, considering the practice of compressing vocals (for recording purposes or live work) is regarded by many as mandatory. I found this aspect to be the only real

let-down of an otherwise great unit.

Harmony Central



The Vocals button gives access to the real essence of the VoicePrism. Here you set up voice double-tracking thickness and harmonies. The harmony channel has four independent, formant-corrected pitch shifters to create harmonies from vocals. The soft knob under each 'Harmony' display selects the available options. Pressing the knob brings up the options, while turning the knob allows you to choose humanising parameters, such as gender, vibrato, timing, and scooping – 'scooping' describes the singing style of sliding up or down to the correctly pitched note. 'Gender' changes the male/female qualities of the associated harmony. A head icon changes from various male heads through to females and even an alien head and, yes, they do all sound realistic (although it has been some time since I've recorded a barber shop quartet of aliens!). Additionally, 'Voicing' allows a ± 2 octave range. The previously mentioned head icons move vertically up and down to indicate a plus/minus octave range. 'Voicing' is the most vibrant of VoicePrism settings, allowing you to set up complete four-part harmonies. The 'Style' menu lets you tweak the human characteristics of each harmony voice independently! The 'Setup' mode shows you the harmony notes that are assigned to the input pitch. Basically, you can input the basic key signature of the song and associated notes to each harmony voice. The 'Mode' menu allows harmony shifts to be smooth, stepped, chordal or externally controlled from a Midi-based keyboard.

Live Use

With a mic input and 48v phantom powering, the VoicePrism is an attractive proposition for singers who wish to control their own effects while on stage. Quite often, singers are at the mercy of in-house systems with sound checks that barely solve performance concerns let alone effects parameter settings on an unfamiliar unit. Most importantly, in-house effect units won't do what the VoicePrism is capable of.

While on stage, mix and vocal effect changes can be controlled from the unit, while you can scroll through preset parameters with a footswitch. Additionally, for use with sequencers, Midi in, out and thru is offered.

You're The Voice?

The TC/Helicon VoicePrism is a must-have for anyone who needs to create vocal harmonies. When it's working with sustained vocal lines the VoicePrism is indistinguishable from the real thing. On more complicated melodies, some machine-like artefacts are noticeable. Careful editing of parameters is required in order to minimise those artefacts.  **Distributed by**  Aureion Technology. Unfortunately, the manual has a matter-of-factly approach that is easy to understand.

This unit can single-handedly revitalise vocal samples and is actually handy to have around for instrument **Price** – I successfully gave drums, bass, keyboards and guitars the VoicePrism treatment. For producers and