



Mu Technologies

Mu Voice £189

PC MAC



A new contender bursts on to the vocal tuning and harmonising scene, but can its synthetic sounds really replace your backing singers?

System requirements

PC 1GHz CPU, 512MB RAM, Windows XP

Mac 1GHz CPU, 512MB RAM, OS X 10.4 or higher

Test system

PC Intel Core 2 Duo 1.86GHz, 2GB RAM, Windows XP

> Mu Voice is the first release from Mu Technologies. It's a vocal processor that's able to tune vocals, add artificial harmonies and produce a number of other interesting vocal effects. The focus is clearly on ease-of-use, with live stage performance very much in mind. It's available in VST, RTAS and AU formats and requires the use of an iLok. A fully functional trial version is available, too.

Mu-sically intelligent

The operation of Mu Voice is centred around two main sections: Preset and Chord. The Preset section governs the basic settings of the four synthetic harmony parts, and the Chord section keeps track of the sequences that the harmonies adhere to. This novel approach means that the 60 Preset slots are saved totally independently of the chord arrangement, so that you can recall or even rapidly switch between different harmony types, irrespective of what the song chords are.

Then, the two sections can either be chained into a sequence using the Chord Scheme panel, or played in using a MIDI controller - Mu Voice can instantly switch between chord

arrangements and the settings of the four harmony parts.

Input the key signature and Mu Voice will provide you with all the basic chord types for that key. Then there are modifiers to add a suspended fourth, sixth, seventh or ninth harmony, should you want to jazz things up with some more out-there chords.

This simplified approach will help beginners who aren't sure which chords will work in the song's key signature. However, it also suits more advanced users, because Mu Voice only locks harmonies on a chord-by-chord basis, so there's no rigid adherence to any particular key signature for the entire song. You can really get experimental and push out colourful chord sequences with very little effort, and different chords can be triggered via MIDI.

Selecting Presets for the harmony settings is even easier. As mentioned previously, there are 60 presets, which store information on the voicing and octave for each harmony part. There's also pitch-shifting, panning, humanising, formant and simple filter controls. The last of these offers a number of preset filters, and also

“You can really get experimental and push out colourful chord sequences with very little effort”

something called Harmonic EQ for sculpting sounds; however, we found that these usually gave less natural and intelligible results. The other controls were far more useful, making it a cinch to dial in and store complex and diverse harmonic variations.

Human harmonies

The Humanize slider introduces variations in the pitch and timing of the generated harmonies, preventing them from sounding too clinical and artificial. It works well, but as with all vocal harmonising products, the real issues are with ambitious pitch-shift ranges – you can only go so far before the results sound unnatural. The formant-shifting helps a great deal here, and in itself can be used to creatively alter the character of a voice, although this works best in busy mixes, as it can sound obviously effected in sparse songs.

Then again, with the continued success of Auto-Tune, and the prevalence of vocoders and telephone EQ effects on tracks these days, it's not unthinkable that unnatural harmonies might catch on, too. Speaking of Auto-Tune, Mu Voice can likewise be used for automatic pitch-correction, but we found the results to be lacklustre, with undesirable sonic side-effects.

Surprisingly, one of the most interesting controls here is the panner. When Mu Voice pans a vocal part, it also introduces a time delay between the left and right outputs, creating the illusion that the voices are coming from different directions. The end result of this is a far more 'spacious' sound than the standard panning effects we're used to hearing.

Despite a few imperfections, Mu Voice looks to be one of the most promising applications of this type that we've seen. Although initially appearing to be somewhat limited in scope, it actually has a vast range of practical uses for the musician. From speedy voice changes to basic intonation correction and easily-accessed harmonic arrangements, Mu Voice just about has it all. You don't need to be a trained musician to get



When pushed to extremes, Mu Voice can start to sound unnatural, but that might be just what you're after...



Mu Voice's minimal latency means it can produce convincing harmonies in a live context

Take it to the stage

With internal latency of less than 6ms, Mu Voice is ideal for use in a live situation. To put that into perspective, the ear has trouble perceiving latencies of less than 30ms. Synthesising multiple pitch and formant-shifted voice clones is surely tricky enough without having to do so in near-real time, but Mu Technologies have managed to tackle the challenge with little compromise in sound quality.

Furthermore, human backing singers would never be perfectly in sync with the lead vocalist, so the minimal latency inherent in Mu Voice architecture makes its results appear no less natural. MIDI input is split into four areas that can be

defined on the panel brought up by clicking the MIDI button next to the chord panel. The four key split areas are: key selection, chord recognition, preset selection and chord scheme navigation. This makes it simple to quickly and smoothly control Mu Voice with a MIDI keyboard (or pre-recorded MIDI), selecting presets and playing chords on the fly for dynamic on-stage performances, though only chords within Mu Voice's internal vocabulary are recognised.

Check out www.youtube.com/mutechnologies if you'd like to see how Mu Voice can be used live in combination with a keyboard.

started, and you certainly don't need to spend hours automating all 70 of Mu Voice's parameters.

We had limited success applying Mu Voice to a range of non-vocal sources, but that's perfectly understandable, since the application is designed to process the human voice. Using simple synthesised waveforms, though, we coaxed some unusual chorus and harmonising effects from the software.

Regarding Mu Voice's intended use as a vocal processor, the overall sound might not be utterly convincing in isolation, but it's as good as many competing products, and is entirely acceptable within a full track arrangement.

In particular, the low-latency performance is sure to astound audiences, who are unlikely to have heard anything like it before. Also, it's worthwhile noting that we've not seen anything else in this price range that can match both the sheer quality of the artificial harmonies produced and the hugely impressive low-latency performance. Stage performers on a budget will doubtless be extremely hard-pressed to find a better live harmony solution. **cm**

Web www.mu-technologies.com
Info Limited free trial available on request

Alternatively

Celemony Melodyne 3 cre8
N/A >> N/A >> £250

With some effort, this can create more natural-sounding harmony parts, though not in real time

TC-Helicon Harmony 4
N/A >> N/A >> £570

Powercore/TDM-only, but generates great four-part vocal harmonies

Verdict

For Built-in automation
Intelligent four-part harmony engine
Ultra-low latency, suitable for live work
Easy MIDI control
Capable of natural-sounding results

Against Pitch correction is mediocre
Best used sparingly

There's not much that Mu Voice can't do when it comes to vocal harmonising, and it's all in real time too

8/10