





FORMANT CORRECTION
The formant tracking can be left on for a natural vocal response, or disabled for special purposes

ZOOMABLE KEYBOARD
Used to enable and disable notes in a scale, and to set the overall correction range



EDIT WINDOW

The main editing area. You can see the original pitch curve and make adjustments

MUSIC SCALE CONTROLS

For any part of the performance you can set what musical scale should be applied to the pitch correction function

Here, you can adjust the retuning response speed of any section of the vocal performance

VIBRATO CONTROLS
Advanced vibrato controls
that can be applied across
any selection of notes or
even individual ones





Vocal Bundle

They recently scored a hit with their Guitar Tool Rack, but how will Waves fare with their new suite of vocal processors?

► SYSTEM REQUIREMENTS

PC: P4 1.7GHz or AMD equivalent (P4 2.8GHz or AMD equivalent for 96kHz operation), 512MB RAM, Windows XP, VST- or RTAS-compatible host application, ILok key for authorisation

Mac: G4 Dual 1.25GHz (G5 Dual 2GHz for 96kHz operation), 512MB RAM (1024MB for 96kHz operation), Mac OS X 10.3.8 or later, AU- or RTAS-compatible host application, iLok key for authorisation

► TEST MACHINE

PC: 1.4GHz Centrino laptop, 760MB RAM, 40GB HD. Windows XP SP2

f you're looking for professional quality vocal pitch processing, there are but a handful of serious options. At the top end of the scale are Antares' Auto-Tune (famous but fiddly) and Celemony's Melodyne (sonically perfect, but quite hard work). Cheaper options include Yamaha's Pitch Fix and Akai's simple but rather short-lived PitchRight – both of these plug-ins work well, but they lack the advanced features that enable smooth workflow.

So, it's with open arms that we welcome a new contender to the ring: Waves Tune. This is Waves' first foray

into the world of professional pitch correction, and it's being aimed squarely at the lucrative Auto-Tune market. It's available both as a standalone product and as part of the Waves Vocal Bundle that we're looking at here.

Less ess

The most innocent-looking plug-in in the bundle is the Renaissance DeEsser. This is designed to eliminate the explosive top-end sibilant sounds that can result from using high-frequency equalisation on close-miked

speech or vocal performances. This tool works well – it has a semi-intelligent adaptive threshold parameter and basically does exactly what it says on the tin. That said, if you're a Cubase SX user you'll already have the excellent Steinberg/SPL de-esser, which is sufficient in the vast majority of cases.

The Doubler tool is hardly revolutionary, but in some ways that's its biggest strength. It combines an intuitive user interface with well-established modulation technologies to perform thickening tasks, and can

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be applied not just to backing and lead vocals, but also to the likes of guitars and keyboards.

The Renaissance Channel strip deserves a special mention. It may look like 'just' a combined EQ/ compressor - seemingly no different to those that are built into host applications such as Cubase, Logic and Sonar - but although its user interface might not be pretty or modern, the difference in sound quality when compared to built-in host equalisers is remarkable. The sound is distinctly analogue (with none of the brittle top-end harshness that all-tootime-saver, especially if you're working with speech samples.

Finally, we come to the star of the show: Waves Tune. This is a high-end automatic pitch correction tool for use on vocals, and as we've already mentioned, is clearly designed to compete with Antares Auto-Tune (see A pitched battle boxout).

Although you can use a MIDI keyboard to control the pitch in real time, the audio signal that you're correcting must be pre-recorded - this is because Tune needs to analyse the pitch before it can adjust it. Unlike similar plug-ins, though, this process is

100 nds bit later laye. Tine. CHICA

Doubler isn't the most exciting tool, but it's great for thickening up vocals

"WAVES CONCENTRATE ON TOP SOUND QUALITY AND EASE OF USE RATHER THEN SNA77Y FEATURES"

often characterises everyday digital sound processing), and it's hard to resist using it on every single channel of your mix.

Fresh Breath

The first of the new plug-ins is the innovative DeBreath tool. This uses two threshold controls - one based on sound level and the other based on a probability graph - to gate out the gasping noises that singers make before each line of a vocal. You can choose what to do with the gated breaths, though if you remove them all, the vocal can sound unnatural.

DeBreath works surprisingly well, although there are some types of breath noise that it fails to recognise. Nonetheless, this tool can be a real

automatic, and if a section of audio hasn't yet been analysed, it will be the next time the section is played back.

Tune's interface is a joy to use. The screen in which you drag and drop pitch information is beautifully rendered and filled with classy touches, including animated zooming and soft drop-shadows under the pitch curves. In terms of functionality, Tune is as complete as you could hope for, and amazingly, the controls for adjusting the musical scale - as well as items such as vibrato speed and depth - all work on a note-for-note basis. This means you have fully automatic control over every individual segment of a performance.

Although it is possible to get slightly better-sounding pitch correction with

Price worth paying

task you could throw at it.

Celemony's Melodyne, that's really a

more specialised type of tool. What

you get with Waves Tune is something that's quick and easy to use, integrates

seamlessly with your sequencer, and yet is fully-featured enough to carry out pretty much any vocal pitch correction

At £725, the Waves Vocal Bundle is certainly a costly package. However, you need to bear in mind that Waves concentrate on top sound quality and ease of use rather then snazzy features. The Renaissance Channel, for example, doesn't look pretty but sounds wonderful. Doubler is quick and intuitive to use, and DeBreath cleans up vocal tracks in a fraction of the time it would take to do it by hand.

The icing on the cake, though, is Tune. It comes with a thorough set of editing tools and can produce very high quality results. Yes it's expensive, but the time it can save you makes it worth paying for. cm

► ALTERNATIVELY

Antares Auto-Tune 4

cm74 >> 9/10 >> £223

The original and ubiquitous pitch correction plug-in

Celemony Software Melodyne Studio cm66 >> 8/10 >> £400

Stunning pitch correcting software, but no plug-in version

A pitched battle

No review of Waves Tune could be complete without a direct comparison with Antares Auto-Tune, the most famous pitch

comparison with Antares Auto-Tune, the most famous pitch correction plug-in of them all.

Tune immediately scores over its rival in the compatibility stakes: it's available as a VST plug-in. Auto-Tune is only available as a DirectX plug-in on the PC, and its graphical mode doesn't work particularly well in Cubase. Antares have been saying for more than two years that a VST Auto-Tune for PC is 'coming soon', but there's still no sign of it.

The pitch correction algorithm in Tune always tracks vocal formant characteristics perfectly, while Auto-Tune's does not. Instead, Antares' offering often produces the infamous 'Pinky and Perky' effect during extreme re-tuning.

and Perky' effect during extreme re-tuning. Waves have also put a lot of work into Tune's interface,

waves have also put a for or work into faile 3 methods, and touches like the animated zoom are more than mere eyecandy. They make you feel like you're in full control. All pitch correction parameters are adjustable per-note, and no pitch information is lost when you save a project in Cubase.

Auto-Tune was once an amazing tool, but Antares will have to double their efforts if they want it to compete with Waves'



offering. At the moment, Tune is the best pitch correction plug-



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