Celemony Melodyne

The first version of Melodyne was unique and intriguing but slightly underdeveloped and irritating to use. Although the look is largely unchanged, this astonishing piece of software has now matured into a much more useful and practical version in the shape of V2.0.

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IF YOU HAVE NEVER encountered Melodyne, the purpose of the software is the melody editing of audio files and is geared towards use with vocal recordings. Melodies can be pitch- and time-corrected on a note-by-note basis, as if they were MIDI.

The main window is much like a DAW's arrange page, with a line for each track, and Solo, Mute and Record buttons on the left. After importing or recording an audio file of a melody, each track line shows graphics representing notes and their amplitudes represented by waveform-style blobs. Following analysis by Melodyne (activated by double-clicking a blob), which takes just a few seconds on a fast computer, these blobs are placed in vertical positions defined by their pitch. One click changes the display to a musical score display where the notes are displayed on a staff. These can be exported as MIDI. Amazing!

Double clicking an already analysed melody opens the editing window. This is similar to the Matrix Editor in Logic, or a greatly expanded MIDI track in Pro Tools, with a line for each note of the scale. Now the blobs can be seen in greater detail and, depending on the tool selected, can display other useful information. Six visible tools are available at top left, click-holding these show several alternative related tools as drop downs.

The six categories are for note selection, pitch correction, formant editing, amplitude editing, time and stretching movements, and note separation, where you can correct the interpretation of what Melodyne thinks are separate notes. In many cases, a thin wavy line appears superimposed to show the exact course of the pitch in absolute detail. A setting enables this to be constantly visible.

Using the main Edit Pitch tool, you can drag the already separated notes up or down in pitch, referring to the note lines to correct or change the pitch or melody. For greater detail, you can split notes into parts and correct them separately. The next most

useful tool is the Pitch Align. By placing this over a note and dragging up or down, the amount of wobble, or deviation from the centre pitch is increased or reduced. Huge vibratos can be tamed using this tool (*but presumably not huge singer egos. Ed*). Pitch Transition changes the graphic to indicate the path of the melody as each note changes, so swoops between notes can be increased or decreased, changing the angle of the slide.

The Edit Amplitude tool allows quick changes to be made to the level of individual notes. Unfortunately, there is no amplitude align tool, this would be on my wish list for the next version (*along with an ego align tool too? Ed*), as wobbling in volume is also a by-product of outlandish vocal vibrato. However, just about every other possibility is covered, with means of stretching and moving notes in time quickly accessible. Formant changes can be achieved, although I found this feature less necessary in most cases as Melodyne automatically corrects formants so as not to change the 'personality'.

Stretching and moving notes in time is easy, and you can even quantise! There are two different algorithms available for processing, but they both

seem to add a metallic vocoder-type twang if changes get too ambitious. All editing is non-destructive, and portions of the same track can bypass the editing, or even use different algorithms. During analysis, Melodyne is also astonishingly good at guessing the tempo of your track, and speeding up or slowing down over a huge range can be achieved using the different tools in the main window.

With the original version of Melodyne, it was a nuisance to have to work separately from the main DAW. This is now all fixed with the implementation of Rewire and something called Melodyne Bridge. The former allows Melodyne to run as a Rewire Slave with most DAWs, including Pro Tools and Logic, and with both these programs this worked seamlessly and simply. With other applications, such as Ableton Live, it can also act as Master. The Melodyne Bridge allows connection between a VST or Audio Units insert and Melodyne. This provides for recording and playback between one application and the other, and again worked beautifully with Logic.

With audio recording and virtually unlimited tracks, Melodyne can run perfectly happily on its own. Its Mixer window, while still basic, includes some fundamental EQ, and allows insertion of Audio Units and certain VST effects. A reverb plug-in is provided which serves well for a basic way of hearing your tracks in some sort of context if you've simply imported a stereo backing track and lead vocal.

While not as snazzy-looking as Ableton Live, many clever under-the-bonnet improvements have made the program friendly and useable, such as multiple undos and editable keyboard shortcuts (although I don't know why all the tools' shortcuts are not defined by default). I successfully and fairly rapidly edited vocal and instrumental parts. When things are this easy, it is tempting to go too far, especially with vocals. Sometimes, a bit of imperfection is desirable but this is useful and lots of fun. ■

PROS Ground-breaking; unique; intuitive; useable; Windows and Mac versions; stable.

CONS 'Metallic' artefacts; no Rewire or Melodyne Bridge in OS9 version.