

Creative tools for deceptively realistic vocals

Singing without a microphone?

For a long time, artificially generated vocals faced major hurdles. The quality of the tools was often questionable when approaching the melody with your own lyrics and original ideas. The mechanical, programmed quality was simply too obvious. Dreamtonics' V Studio Pro 2 synthesizer changes all that. While the workflow still takes some getting used to, the results are sometimes almost indistinguishable from human vocals. And unlike online tools for AI vocals, you have complete control over every note and every syllable of the vocals. That's how vocal synthesis works!

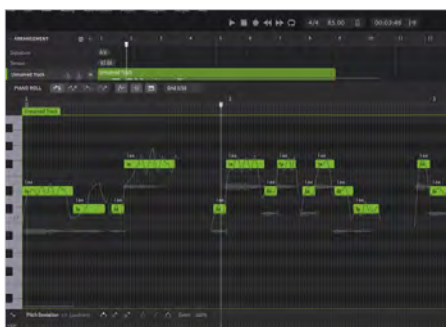


Audio demo



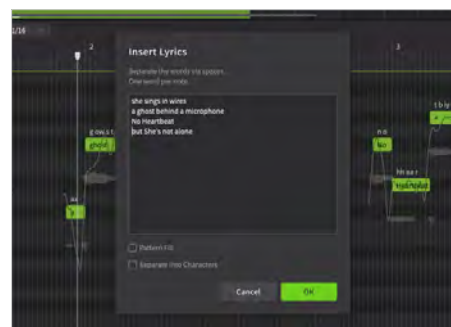
1 Vocaloid to Synth V2

If you delve a little into the history of vocal synthesizers, it quickly becomes clear why, in addition to English, Japanese, Korean, Mandarin Chinese, and Cantonese are included in Synthesizer V Studio Pro 2. Vocaloid, released in 2004, established an entire genre in East Asia, and Vocaloid songs are often in the charts. ❖



2 Melody first

You can create a melody in Synthesizer V Studio Pro 2 in several ways. In the plug-in, you can create notes with the mouse in the piano roll by double-clicking, or enter Draw mode and draw them in. Alternatively, you can also play them using a MIDI keyboard. You can also import entire MIDI clips with melodies via File->Import. ❖



3 La La Land

Then select one of the voices you selected upon purchase; for me, it was „Liam.“ And your created melody will sound like a beautiful „La La La.“ To avoid the hassle of typing a word for each note, select all the notes, right-click them, select „Insert Lyrics,“ and insert your English (or Korean) lyrics. ❖



4 Hyphenation

The plug-in distributes the lyrics on the notes, albeit rather imprecisely. This is where the detailed work begins. You can shorten or lengthen notes, split syllables into multiple notes („Heartbeat,“ for example, is split between two notes by creating a second one with a „+“ after the first; the plug-in automatically splits them), and more. ❖



5 Detailed work

New in version 2 of the plug-in are six controls that allow you to change the vocal timbre, which is a different parameter for each voice. For example, I can make Liam's voice sound whispery (Whispery), hoarse (Hoarse), or brighter (Bright). If you really want to get into the details, you can even vary this per syllable (!) and automate it in the plug-in. ❖



6 Even more fine-tuning

As you can see, it requires a lot of detailed work. Once you're satisfied with the result (tip: save the Synth V2 project in the plug-in under File->Save To External File), you still need to export it as a WAV file via the Render View in Synthesizer V Studio Pro 2. Here you select the quality, save location, and file name, and then the tool gets to work. ❖

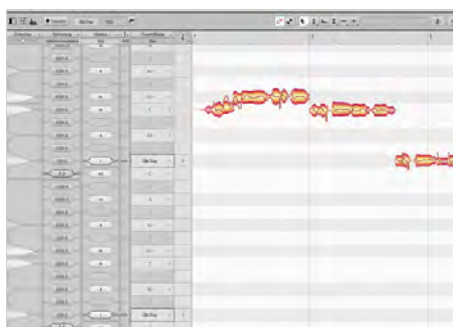
Hands-on: Vocal re-synthesis

AI vocals finally in real time

After vocal synthesis comes vocal re-synthesis. Known in AI music as voice changers, these tools, which let anyone sing like a pop star or studio singer, were previously web-based. However, uploading the acapella separately, then waiting for the server, and then a subscription system wasn't exactly practical. With plug-ins like Vocoflex from Dreamtonics or VoiceAI from Sonarworks, there are the first tools that make this possible directly in the DAW in (almost) real time. Whether for better vocals or sound design, this is the future of synthesis!



Audio demo



1 I hate my voice

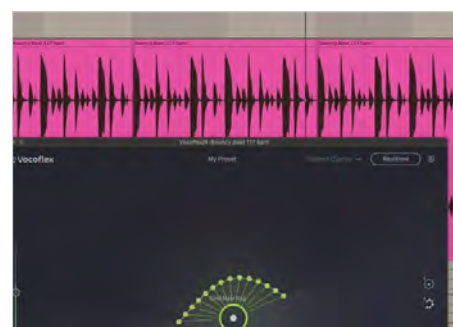
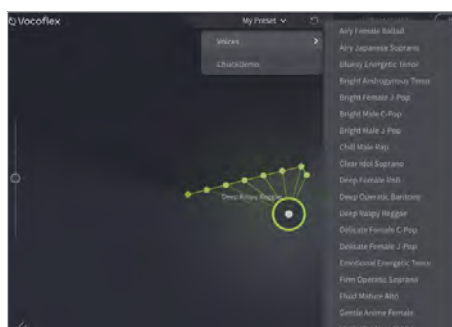
Many producers who record themselves know this: no matter how fat the beat, the track how epic, if you want to record vocals, the whole thing quickly stumbles. Too inexperienced, too insecure, overly sensitive neighbors, not the right gear... The reasons are manifold, and the off-key, muffled-sounding vocal recording seems relentless ❖

2 Better than Auto-Tune?

For this reason alone, I can't demonize vocal tools like Melodyne or Auto-Tune, as they have given countless producers more confidence with their voices. But both have their limitations. Auto-Tune in particular, whether in trap with fast ReTune speed or glassy like Cher, sometimes distorts the voice to the point of a robot. ❖

3 Vocoflex

A tool like Vocoflex goes a step further, making your voice sound completely like that of a professional studio singer. And almost in real time. The tool isn't quite ready for the stage yet. One instance generates up to 150 milliseconds of latency; even in the lowest real-time mode, it's still just under 40 milliseconds. ❖



4 Reggae vibes

For demonstration purposes, I loaded the same vocal loop from Ableton's library as I did with Zyklop. The plug-in includes over 40 voices, and you can also use your own vocal recordings to train Vocoflex. When you load it as an effect, you can choose from these vocal models. I chose „Deep Raspy Reggae“. ❖

5 Vocal acrobatics

The voice sounds different, but still unnaturally high. The poor baritone reggae singer has to really push to sing that high. The pitch can be adjusted at the bottom left of the tuning fork. An octave lower (-12) makes the whole thing sound more realistic. If you now load a second voice model, you can mix the two for completely new voices! ❖

6 Sing my synth

Nobody said that Vocoflex can only be used on vocal recordings. This way, the effect becomes a beatboxer on drums, and an improvisational talent on (monophonic) strings or wind instruments. Only with polyphonic recordings, such as piano chords or choirs, does Vocoflex not (yet) keep up; it has to be monophonic for the plug-in to work. ❖