

TAL-VOCODER

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Introduction

TAL-Vocoder is a vintage-style vocoder with 11 bands that produces the sound of vocoders from the early 80's. We mixed analog-modelled components and usability with digital algorithms to create an outstanding vocoder sound.

The plugin has included a synth with a VCO (Voltage Controlled Oscillator) to create classic analog waveforms. It can produce carrier signals with a lot of overtones.

Flexible sidechain routing possibilities also allow feeding your carrier signals to the plugin.

Please have a look at the Vocoder WIKI entry to find out the details about how a vocoder works and for understanding the terms carrier and modulator:

<https://en.wikipedia.org/wiki/Vocoder>

It's tested and works within the most common audio hosts as *Ableton Live*, *Cubase*, *Logic Pro*, *Garage Band*, *Reaper* and *DSP-Quattro*. There is no standalone version available. Try the unregistered demo version to be sure that the plug-in works in your environment. The demo will play a noisy sound every minute.

Please use at your own risk. We take no responsibility for any damage caused by our VST, AU (Audio Unit) and AAX plug-ins.

Installation

Windows

Requirements:

- 64 bit sequencer software (VST 2.4, VST3 or AAX compatible)
- Windows 7 or newer

Installation:

- Download the file *install_TAL-Vocoder-2.zip* and unzip it.
- You can copy the plug-ins manually to your hosts VST directory or the VST3 version into the VST3 directory. The zip file contains all plug-ins. Our plug-ins do not require the installer.

VST3 Directory:

C:\Program Files\Common Files\VST3

AAX Directory:

C:\Program Files\Common Files\Avid\Audio\Plug-Ins

In hosts like Cubase, the plug-in may require a computer restart to appear in the host. Some hosts may also need a plug-in rescan.

If you use Ableton Live and the plug-in does not show up after a VST plug-in rescan, try to disable and re-enable VST plug-in support.

-

Uninstall:

Just delete the plug-in file to uninstall it.

OS X

Requirements:

- OSX 10.9 or higher.
- 64 bit sequencer software (VST 2.4, VST3 or AAX compatible)

Installation:

- Download the *TAL-Vocoder-2-installer.pkg*, unpack it and run the installer. The installer copies the plug-in to the right directory. It installs all available versions by default (VST, VST3, AU, AAX).

Uninstall:

Delete the plug-in. It's located in following directories:

*/Library/Audio/Plug-Ins/VST/
/Library/Audio/Plug-Ins/Components/*

In hosts like Cubase, the plug-in may require a computer restart to appear in the host. Some hosts may also need a plug-in rescan.

You maybe need a OSX restart for the Audio Unit.

If you use Ableton Live and the plug-in does not show up after a VST plug-in rescan, try to disable and re-enable VST plug-in support.



Carrier

The carrier section contains a VCO that can be triggered with MIDI NoteOn and NoteOff events. This works similar to other instrument plug-ins. It is also possible to use an external carrier signal with the different vocoder counting options.

The VCO contains four oscillators. A pulse, saw, sub oscillator pulse and a noise oscillator. The sub oscillator plays one octave lower.

There is a SYNC button that sync's the pulse and saw oscillator to the sub oscillator.

Vocoder

The vocoder creates the output from the carrier and the modulator input signal. It only creates a sound if both signals are there.

MOD IN

Modulator input volume. The modulator is a human voice in most cases. On the right is a volume meter that shows the current volume.

COMPAND

This reduces the modulator dynamic range and makes quiet signals louder.

CAR IN

Carrier signal input volume. On the right is a volume meter that shows the current volume.

HARMONIC

The harmonic knob introduces some harmonics to the carrier signal.

RELEASE

This tunes the release time of the modulation envelope.

ESS INT

Synthesize “ess” sounds if there are not enough overtones in the carrier signal. This can be useful for a deep played saw, for example. It makes the voice more understandable. If you already have a lot of overtones in the carrier, you maybe not need this.

VOCODER 11 BAND EQ

The equalizer controls the volume of each frequency band.

CHORUS

Enables the chorus effect. The effect is applied to the output signal.

INPUT MODE

There are a lot of possible routings:

- MIDI C: internal synth as carrier
- Audio M: current audio channel is modulator
- Audio C: current audio channel is the carrier
- SC C: sidechain is carrier signal
- SC M: sidechain is modulator signal

Routing examples in different DAW's

There are a lot of different possibilities how you can use the vocoder in your DAW.

We show a few examples here with the default input configuration: MIDI carrier and the audio channel as modulator.

Ableton live

- Insert **TAL-Vocoder** on an audio channel.
- **Add a modulator audio file** to that channel (most time a voice).
- **Route MIDI to TAL-Vocoder** using **MIDI To**.



Logic X

- Create a new **instrument channel**. Make sure it is **stereo**.
- Load TAL-Vocoder as **MIDI controlled effect** in logic to that channel.
- Create a **new audio channel** and load a modulator audio file (a voice).
- Choose that **audio channel as side chain** in TAL-Vocoder.
- Keep the default input mode. **Verify with the MOD IN meter** if you get the modulator signal.
- You need to **play MIDI notes** on the instrument channel and **play audio at the same time** to get an output.
- You may need to mute the modulator channel. Otherwise you also hear the unprocessed voice.



Reaper

- Create a new **audio channel**.
- **Add** your **carrier** audio file to that channel.
- **Load TAL-Vocoder** to that channel.
- **Arm track**.
- **Choose a MIDI input** for the track.



Bitwig

- Create a new **audio channel**.
- **Add** your **carrier** audio file to that channel.
- **Load TAL-Vocoder** on an instrument channel
- **Send MIDI** from the instrument channel to **TAL-Vocoder**



Pro-Tools (MIDI C / AUDIO M)

- Insert Tal-Vocoder-2 on a **Stereo Audio** track
- On a **MIDI track**, follow this path for the correct MIDI output to control the Vocoder
- Track Name of **Audio track** > Individual Targets > Tal-Vocoder-2 > Channel 1
- Record enable the **MIDI track** so the output of what you play on your MIDI controller will travel to the plugin



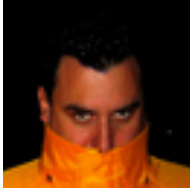
Pro Tools (MIDI C / SC M)

- Insert Tal-Vocoder-2 on a **Stereo Instrument track**
- Change input configuration to MIDI C / SC M
- On a **Mono Audio track**, change the track output to Bus 1 (or any mono bus)
- On Tal-Vocoder-2, change the key input to Bus 1 or the mono bus you used
- Record enable the **Instrument track** so the output of what you play on your MIDI controller will travel to the plugin



Credits

- TAL Vocoder coded by Patrick Kunz TAL Software GmbH © 2023
- Beta testing, feature requests, and audio examples by David "Scratch-D" Noller of Dynamix II (www.dynamixii.com)



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