### OCS-45 Cassette Simulation (v1.0.3)

## **USER MANUAL**



This is a manual for OCS-45 Cassette Simulation (v1.0.0) by Oversampled. Here you will find all the information about the plugin.

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# Minimum system requirements

PC: Windows 7/8/10 (ONLY 64bit)

Mac: Mac OS 10.11+ (El Capitan)

# Installation paths

#### Windows:

- PC VST2: C:\Program Files\Steinberg\Vstplugins
- PC VST3: C:\Program Files\Common Files\VST3

#### Mac:

- Mac VST: Macintosh HD/Library/Audio/Plug-Ins/VST
- Mac VST3: Macintosh HD/Library/Audio/Plug-Ins/VST3
- Mac AU: Macintosh HD/Library/Audio/Plug-Ins/Components

### OCS-45 Data (Presets, GUI, Logs)

- PC:
- User presets, logs, settings:
  - C:\Users\[USERNAME]\AppData\Roaming\Oversampled\OCS-45
- o GUI, factory presets:
  - C:\Program Files\Oversampled\OCS-45
- Mac: Users/Shared/Oversampled/OCS-45

If your plugin window is too big and you cannot access settings to resize it please edit "OCS-45.settings" file (with notepad for example) and change "val" to "O" in line:

"\VAI UF name="defaultEditorSize" val="2"\>".

# Authorization

After your first opening of the plugin you'll see an activation window. Here you must put an activation key that we've sent you to your email address and an email address used for your order.



#### SERVER RESPONSES AND THEIR MEANING

- *Server is under maintenance.* As the response says.
- Your license key has been used too many times. Contact Oversampled support. Trying
  to use the same activation key for the fourth time will result in this response to show up,
  please follow the instructions.
- Wrong license key and/or email. The license key and/or email you provided is incorrect.

- <u>Server error or connection issue.</u> happens when your internet connection is disabled or not working or when there's an server error.
- <u>Your email and key didn't match.</u> the license key you provided doesn't match the email, or the opposite.

### **PLUGIN STATUS**

- Offline Mode Appears only when the plugin has been already registered (but there are situations in which it has to be validated again), plugin could not check the license key, there is no internet connection or server is not responding. The plugin will try to connect with the server in 5 minutes.
- <u>Validating Plugin</u> Our server is analyzing the license key and email, if the data is incorrect the register window will show up.

# Plugin Manual

## **OCS-45 CASSETTE SIMULATION LOGO**

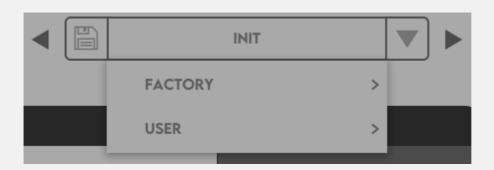
Click on the plugin's logo to see the About window.



#### **PRESET BROWSER**

Allows you to open, save and switch between predefined settings for OCS-45.

- **Arrows** Skip to the next preset on the list
- **Disk Icon** Save your preset
- Preset Name/Down Arrow Open a list of presets



### **PRESET SAVE PATHS**

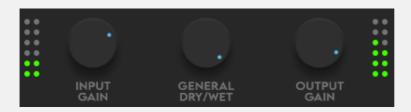
- PC C:\Users\[USERNAME]\AppData\Roaming\Oversampled\OCS-45\Presets\User
- Mac Users/Shared/Oversampled/OCS-45/Presets/User

### DO NOT CHANGE THE STRUCTURE OF PRESETS FOLDERS!

#### INPUT/OUTPUT SECTION

Allows you to control input/output gain and general dry/wet of the plugin

- Input Gain Sets the volume before it gets into the processing chain.
- Output Gain Sets the volume after OCS-45 processes it.
- Dry/Wet Sets the ratio of Wet (processed) signal to Dry (unprocessed).
- **Volume Indicators** Left one shows the volume level on the input, right one on the output. Red indicators mean the signal has reached OdB.



#### **TURNING EFFECTS ON/OFF**

To disable a particular effect completely, click a glowing dot on its name bar or the whole name bar.



## **WOW/FLUTTER**

Adds a pitch modulation to the sound.

- Wow Depth Sets the amount of Wow modulation.
- Wow Rate Sets the speed of Wow modulation.
- Flutter Depth Sets the amount of Flutter modulation.
- Flutter Rate Sets the speed of Flutter modulation.

#### **WOBBLE WINDOW**

A visual representation of the pitch modulation applied to the sound.



### **NOISE**

Generates one of the four available noises along with your sound to simulate low fidelity hardware, noise is equipped with an envelope follower so it stops whenever your sound stops playing.

- **Noise Knob** Allows you to switch between 4 different types of noise (you can also click on the noise type to choose it).
- **Volume Knob** Sets the volume of the noise.
- **D/O Switch** Decides whether dropouts are being applied to the noise.

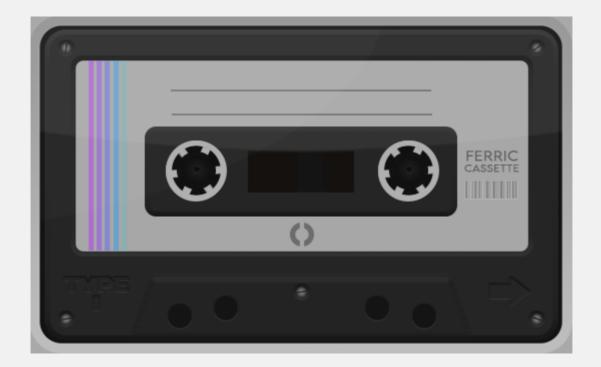


### **CASSETTE TYPE**

Allows you to choose one of the four available cassette types.



**I Ferric Cassette** - ferric or 'normal' cassettes were historically the first, the most common and the least expensive; they dominated the pre recorded cassette market.



**Il Chromium Type Cassette** - type Il have, on average, a higher signal-to-noise ratio than quality Type I tapes. Type II has been historically known as 'chromium dioxide tape' or simply 'chrome tape'. High frequency response has been increased.



III FeCr Cassette - introduced in 1973, double-layer ferrichrome tapes. They were advertised as 'the best of both worlds' - combining good low-frequency MOL of microferric tapes with good treble performance of chrome tapes. Unfortunately the idea failed to attract followers.



**IV Metal Cassette** - were introduced in 1979, they are more bassy and include louder high frequencies.



Each of the cassettes applies a different frequency boost or cut based on the sound of real world cassettes.

### **CASSETTE SETTINGS**

This section allows you to adjust parameters of cassettes.

- Quality Lower values represent quality loss, higher values keep the cassette quality at the default level.
- **Dry/Wet** Sets how much each cassette affects the sound.
- Mono Allows you do downmix the final sound from Stereo to Mono.



#### **DISTORTION MODULE**

Allows you to add color to the sound by applying distortion.

• **Distortion Type Knob** - Allows you to switch between 5 different types of Distortion (you can also click on the distortion type to choose it).

### There are 5 distortion types:

- **Tube** A semi-aggressive form of distortion, simulates Tube amplifiers.
- Diode A specific way of clipping, produces an aggressive, distorted sound. Simulates
   Diode amplifiers.
- **Soft Clip** Rounds up the endings of the waveform that cross a level of OdB resulting in a pleasant warm sound.
- Saturation A subtle form of distortion that adds pleasant-sounding harmonics.
- **Downsample** Reduces the sample rate of the signal creating a bright ringing tone.

### Adjustment knobs:

- **Drive** Sets the amount of distortion.
- **Tone** Decides on the brightness of the sound.
- **Dry/Wet** Sets the ratio of Wet (processed) signal to Dry (unprocessed) signal.



#### **DROPOUTS**

Adds random volume dips on each of the stereo channels, simulates damaged cassette.

• **Amount** - Sets the volume dip size, lower values add a delicate feel, while higher create more frequent and audible volume breaks.



#### MENU BUTTON (bottom left corner)

Includes additional functions:

- Oversampling Turning on oversampling will apply different oversampling ratios depending on the input sample rate, it will create smoother and more pleasant-sounding results at the cost of using more CPU power.
- **Dark Mode** Allows you to switch to a more easy-on-eyes mode.
- Interface Size Sets the size of the plugin (3 settings for 3 different screen sizes).
- Show Preset Folder Opens a folder in your system where all presets are stored.
- Rescan Preset Folder Scans a preset folder and syncs its content with the plugin.
- Manual Opens this page in your browser.
- About Shows who worked on the plugin, special thanks, shout-outs and the plugin version.



# Support

If you encounter any bugs or problems please contact us at: <a href="mailto:support@oversampled.us">support@oversampled.us</a>

# **Bug Fixes**

### FL Studio 'broken sound'

After loading the plugin in FL Studio, the DAW doesn't handle it properly and creates a broken sound.

#### Solution:

Open plugin GUI and on the top bar (plugin container window) open 'detailed settings', go to 'VST wrapper settings' then 'Troubleshooting' and turn on 'Use fixed size buffers' (hit 'yes' on the pop-up window).

# **Credits**

#### **Production:**

Oversampled

## **Product concept:**

Maciej Grzywacz Piotr Włodarczyk

### **DSP & Development:**

Maria Polak Piotr Zimniak

#### **GUI DESIGN:**

Maciej Grzywacz

#### VST3 SDK:

Steinberg Media Technologies GMBH