# **Audio Effect Package**

# Introduction

The Audio Effects Package means that there is finally a comprehensive collection of audio effects for the Casablanca system.

The effects can be roughly divided up into two groups:

1 Effects for sound editing, such as De-hummer, MaxVol, NoiseGate, which are primarily used for sound correction

2 Effects such as Chorus, Delay, Hall, Vibrato, which are used for creative sound design

### **DeHummer**

Reduces the static hum caused by the mains electricity supply. Depending on the strength of the interference, it might be necessary to apply the effect several times.

Frequency: 50 Hz for the hum caused by the mains electricity network in Europe 60 Hz for the hum caused by the mains electricity network in the United States

### Chorus

Creates a denser sound by mixing in additional slightly altered voices. The chorus can also be used to breath some life into a monotonous sound.

Intensity: How strong an influence the effect will have (100% means maximum, 0% means no effect)

Depth: Intensity with which the pitches of the secondary voices are changed (detuned).

Speed: Adjusts the oscillation of the pitches of the secondary voices.

### Delay

Adds rhythmical echoes to the sound. The volume of the echoes fades out so they get quieter over time. If you want to use this kind of effect, you should leave some space at the end of the recording for the final echoes, since the effect is not able to lengthen the recording of its own accord.

Intensity: How strong an influence the effect will have (100% means maximum, 0% means no effect)

Decay: How quickly the echoes become quieter Delay: The time that elapses between two echoes

### **Dynamic**

Adjustment of volume differences. The Dynamic effect allows you to attenuate peaks in the signal. Quiet sounds can be amplified or also suppressed. Imagine you have a recording that is generally very quiet but at some point contains a loud bang. You will not easily be able to make this recording louder without over-amplifying the bang. But the Dynamic effect allows you to do this!

Dynamic: Change the volume range

### **Echo**

Generates echoes within a certain time range. Compared with the Delay effect, this effect allows you to influence the number and distribution of the echoes directly. All the other details described for the delay effect also apply to this effect - the echoes fade away slowly and the recording is not lengthened in order to create space for the final echoes.

Intensity: How strong an influence the effect will have (100% means maximum, 0% means no effect)

Echo from ... to: Times for the echoes

Echoes: Number of echoes to be generated

### **Filter**

Filters (suppresses) frequency ranges in a sound. You could, for instance, use a low-pass filter to make a music recording sound distant.

Intensity: How strong an influence the effect will have (100% means maximum, 0% means no effect)

Filter type: Filter characteristic curve, i.e. which range of frequencies is allowed to pass

Frequency: At what frequency the filter will begin taking effect

# Flanger

A modulation effect that adds a lively variation to the sound.

Intensity: How strong an influence the effect will have (100% means maximum, 0%

means no effect)

Decay: Various sound variations are possible Depth: Various sound variations are possible Speed: Various sound variations are possible

### Speed

The sound is detuned and at the same time changes in length. The principle is similar to changing the playing speed of tape recorders or record players. If the pitch of the sound is increased it will also become shorter. Similarly, if the pitch of the sound is decreased it will become longer.

Factor: Percentage change in the pitch

### Hall

Creates a spatial impression. The effect generates a multitude of sound reflections (echoes). The volume, density and tone quality of the reflections are changed over time. This effect can be used to simulate the acoustic properties of various rooms.

Type: Various room types

Intensity: How strong an influence the effect will have (100% means maximum, 0% means no effect)

### Harmonic

Generates resonances at certain pitches. If harmonic pitches are stimulated, the recording can be made to "sing".

Intensity: Strength of the effect

Tone: Fundamental tone for the chord

Chord: Chord preset

### Tone control

Allows you to adjust the tone. This effect works in a similar way to the tone controls on a hi-fi sound system. If, for example, the voice of the narrator in a recording is drowned out by other sounds, you can improve the situation by slightly boosting the mid frequencies whilst slightly reducing the treble and bass.

Low: Adjust the low frequency range Mid: Adjust the mid frequency range High: Adjust the high frequency range

### **TimeChange**

The length of a sound can be lengthened or shortened by a fixed amount - the recording is then stretched or compressed accordingly. No part of the recording is cut off. You can use the TimeChange effect to adapt the music recording to the length of your video. The effect, however, should only be used to make slight changes. Very strong changes, e.g. as a result of applying the effect repeatedly, will quickly lead to losses in quality.

Change: Absolute change to the length in frames

Source: Fine-tuning for different signals

### **TimeStretch**

The length of a sound is changed in percent. No part of the recording is cut off. The same applies here as described for the TimeChange effect.

Stretch: Percentage change in the length Source: Fine-tuning for different signals

# Sway

Makes your recording "whine". This effect is similar to the sound a faulty cassette recorder makes. A short analysis takes place before the actual calculation is carried out.

Factor: +/- Percentage change in the pitch and speed

Waveform: Type of oscillation that is to be used

Frequency: How quickly you want the LFO to oscillate

### MaxVol

Increases the sound to the maximum volume possible without distortion occurring. During the first process step, the recording is checked to see whether there are sufficient reserves left for changes to be made (the status bar does not increase during this process). The signal is then amplified during a second process step.

There are no settings options

### **NoiseGate**

Fade out quiet parts of the recording. This can, for instance, be used to fade out the volume of the background noise that can be heard in the pauses between the spoken parts of speech recordings.

Attack: How quickly the fade-in and fade-out should occur

Threshold: The volume level below which you want the sound to be faded out

### **Normalize**

Adjusts the sounds to a particular absolute level. The two processing steps already described for MaxVol also apply here.

Level: Target volume level

#### **Phaser**

A modulated comb filter that adds lively variations to a sound. As time passes, the sound distorts and becomes clearer again. This kind of effect has been used, for instance, to modulate the voices in science fiction films.

Intensity: How strong an influence the effect will have (100% means maximum, 0%

means no effect)

Depth: Controls the intensity of the effect Speed: Controls the rate of modulation

## **Phono Convert**

Corrects record-player recordings that have been recorded at a different speed.

Type: Playback speed / recording speed

### Radio

Simulates the sound of old radios. The effect focuses on the limited range of pitch of these kinds of devices and simulates various interference effects.

Preset: Type of radio

### Retro

Adds distortion effects to a recording so that it sounds antique.

Noise Level: Volume of the blanket of sound

Noise Sway: Speed

Crackle: Intensity of crackling sounds

### Reverb

Creates simple reverberation effects. In contrast with the Hall effect, this effect is based on a simpler but quicker process. This effect is useful if you only want to give the sound a slight spatial or echoic feel.

Level: Volume of the reverb effect Decay: Density of the reverberation Delay: Length of the reverberation

### Robotize

Creates a metallic rasping sound. The Robotize effect uses disharmonic resonances and can therefore be used to add a metallic characteristic to a sound.

Intensity: Clarity/intensity of the effect Delay: Tone quality of the metallic sound

# **Telephony**

The sound is modified so that it sounds like you are hearing it over the telephone. Telephone transmission strongly reduces the quality of the sound of voices, particularly when older telephones are used. The effect can be used to simulate this kind of loss of quality.

Preset: Type of telephone

### **PitchShift**

The pitch of the sound is changed. This effect can be used to subtly correct the pitch. Although strong changes to the pitch unfortunately also diminish the sound quality, it is nevertheless a lot of fun!

Intensity: How strong an influence the effect will have (100% means maximum, 0%

means no effect)

Pitch: Percentage change in the pitch Source: Fine-tuning for different signals

### **Tremolo**

A cyclical volume fluctuation. The Tremolo is suitable for such things as helicopter effects.

Amplification: Intensity of the volume change Waveform: Type of oscillation to be used

Frequency: How quickly you want the LFO to oscillate

## **Vibrato**

A cyclical pitch fluctuation. The Vibrato effect can, for instance, be used to create funny voice effects. You could, however, also use it to create a police siren from a simple sinusoidal test sound.

Pitch: +/- Pitch change in %

Waveform: Type of oscillation that is to be used

Frequency: How quickly you want the LFO to oscillate