

REF



Sound

REFERENCE

Copyright and Trademark

Please read the license agreement in the 'Getting Started' booklet carefully. Subject to technical alteration.

All rights reserved. Subject to change without notice.
Release 4700; Subject to technical alteration.

Printed in Germany

AIST - Animated Image Systems Technology GmbH
Mobil-Oil-Str. 31
84539 Ampfing
Germany
Tel.: ++49 (86 36) 98 35 0
Fax: ++49 (86 36) 98 35 22
Internet: <http://www.aist.com> (English)
Internet: <http://www.aist.de> (German)
E-mail: info@aist.com



© 1997 - 2000 AIST - Animated Image Systems Technology GmbH



SOUND

Contents

Incidental Music	4
Source Viewer	6
Timegraph	7
Preview	7
Sound Effects	8
Sound Volume	8
Sound Balance	8
Sound Equalizer	8
Sound Timbre	9
Sound Reverb	9
Noise Gate	9
Power Pan	9
Sound Compressor	10
Rendering	11



Manual



Tutorial



Reference



Effects

Incidental Music



A video without music? Unthinkable! We are so used to hearing drum rolls at the most gripping scenes of a film and violins when the hero gets his girl that it would be impossible for an amateur director to make a video without music.

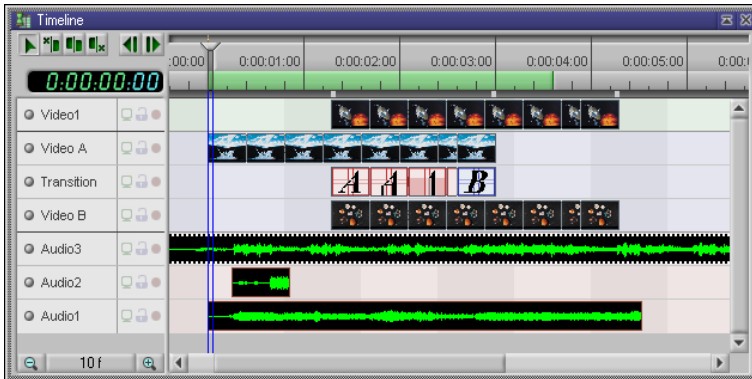


The **Timeline** contains special audio tracks. An audio track is exactly like the other tracks in that an object can be inserted, activated, deleted, edited and moved.

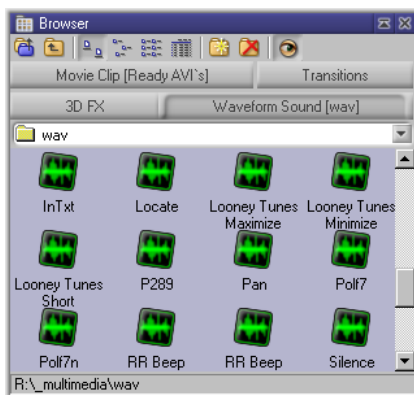


Audio files are represented by a waveform in the **Timeline**, while a **Movie Clip** is represented by frames.

Audio files positioned one on top of the other are mixed. As in a studio individual instruments can be merged, accentuated or softened.



Compressing an audio file to speed it up is not possible as this will simply edit the file. After editing, an audio clip can be stretched to the original size and the sound that has been cut away automatically returns.



Audio files are accessed from the **Browser** like every other object and can be inserted into the audio tracks by double-clicking or by dragging them directly from the **Browser**.

Source Viewer



By positioning the pointer over a audio file in the **Browser** a source preview will appear or be heard provided the **Source Viewer** is activated.

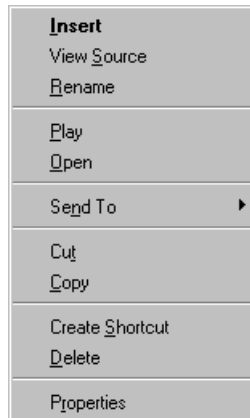


The source preview plays back the waveform sound. It will disappear when the pointer is moved away from the file.



Click the file and the source preview remains when the pointer is moved away. The slider can be used to find an exact position or to stop the preview completely (see the 'Reference - Preview' booklet).

A menu appears with a right-click on an object in the **Browser**.



Insert: Sound is inserted.

View Source open source viewer

Rename: The sound file can be renamed.

Play and Open: The player plays back the audio file.

Send to: The audio file can be sent if the settings are suitable.

Cut: To delete and save to clipboard

Copy:

Create Shortcut:

Delete:

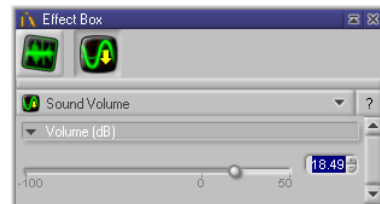
Properties: The file properties are displayed in a window with 3 Tabs

When an audio clip has been inserted and is activated it is only visible in the **Timeline**, **Effect Box** and **Timegraph** and not in the **Canvas** or **Preview**.



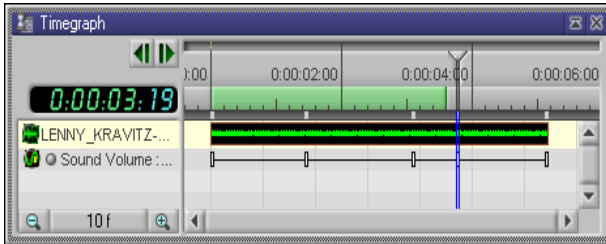
The **Effect Box** for the waveform sound looks like this:

The audio effect Sound Volume has been applied to the object.



In the **Timegraph** the activated audio track with effects and keyframes is displayed like the video tracks. Instead of an image, a sound pattern is visible which is different for every melody.

Timegraph



- ▶ A menu in which you can activate sound and audio scrubbing appears with a right-click in the **Preview** window.

The audio preview is played back in the **Live Preview in Realtime**.



Preview

- ❗ **Enable Sound** only works if **Maintain Frame Rate** is also selected.



Sound Effects

Sound Volume



The volume can be adjusted between -100 dB and 12 dB. An increase of 6 dB means doubling the volume.

Sound Balance

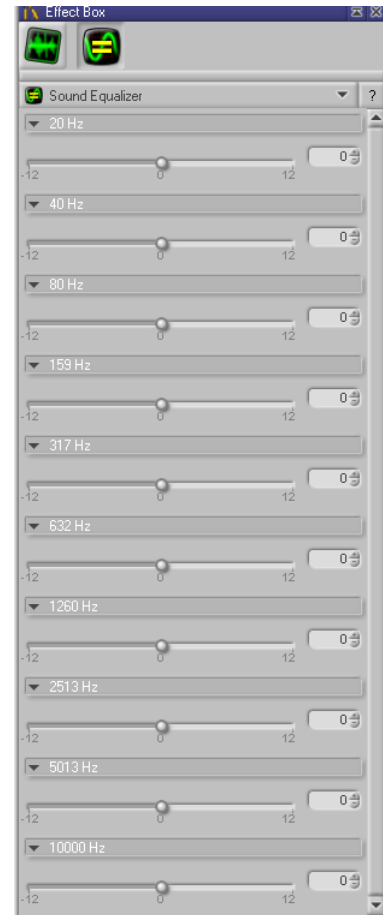


The balance between the two speakers can be adjusted here.

Sound Equalizer



This set of sliders features on every good stereo. The sound is divided into frequency groups which can be separately reinforced or suppressed. In MoviePack there are 10 such groups which means very precise tuning is possible. If the values are set to 0 the audio clip is played back in original.



This effect has two parameters **Bass** and **Treble**.

The **Bass** ranges from -12 dB to +12 dB. At very low values the basses are suppressed and the music sounds flat. At higher values the basses contribute to a powerful sound.

Treble means shrill and this is exactly what it sounds like. The values range from -12 dB, where the sound is muffled, up to +12 dB, where the pitch is very pronounced.

Sound Timbre



This effect basically produces an echo. The transmitted sound is reflected.

The parameter **Send** determines the delay between the transmission and the reflection in milliseconds and at high values the sound is more powerful.

Pre Delay determines the time between the reflection and at higher values the echo is much stronger.

Room Size simulates the size of the room, this means the sound will be reflected sooner or later.

Sound Reverb



This effect suppresses noise and soft sounds.

Threshold (dB) ranges from -100 dB to 0 dB. With increasing values the threshold becomes higher so that even at high settings certain parts of sound can be suppressed.

Attack Time is the response time which determines the delay of the effect after reaching the threshold point.

Hold Time is the minimum length of the effect.

Release Time is the time between falling short of the threshold point and the end of the effect.

Noise Gate



This effect (panoramic control) is used to 'move' or pan the apparent position of a single sound channel between two outputs.

Power Pan



The basic purposes of this effect are:

- Reduction
- High frequency filter
- Delay



Imagine a stage with an orchestra. From the audience's viewpoint the violins are normally on the left side, the basses on the right and center back are the percussionists.



The parameter **Position** determines the distribution of the sound from the speakers. The volume is divided proportionately.

Attenuation Amount level of reduction.

Base distance indicates how far apart the imaginary left and right microphones are positioned.

Filter amount is the mute values for higher frequencies.

Filter cutoff (Hz) is the threshold of the filter.

Sound Compressor



The Compressor limits the dynamic, it suppresses signal levels which are too high, reinforces soft sounds and achieves a balance between very loud and very soft sounds. Overall the volume is raised.

Threshold ranges from -36 dB to 0 dB.

Compression ratio determines how strong and which dynamic should be compressed.

Post-Gain controls the amplification of the compressor output in order to compensate.

Attack Time is the response time, it determines the delay of the effect after reaching the threshold point.

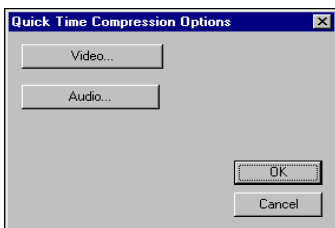
Release Time is the period in time between achieving the lowest threshold point and the end of effect.



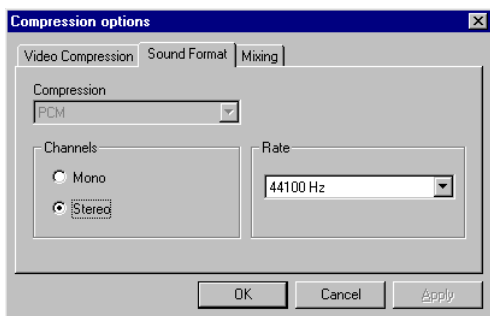
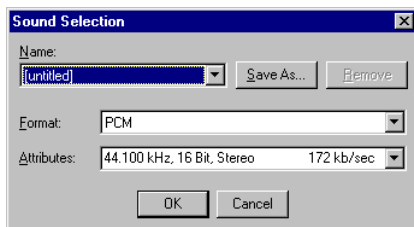
Rendering

Audio rendering must be selected in the chosen format.

The render default settings can be selected on the **Render** menu select **Render Setup**. Under the **Format** tab select **Compression Options**. This is only available with three formats.

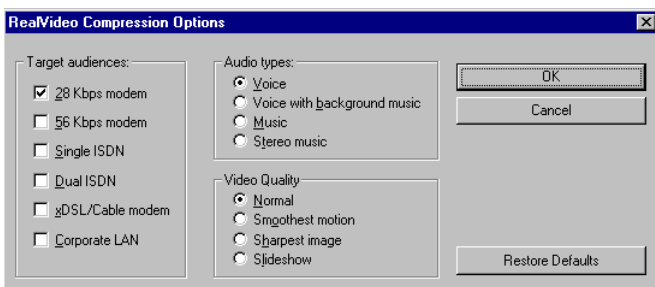


The format Apple QuickTime allows you to determine the audio quality.



In the format Microsoft Video (AVI) the compression rate can be determined from 8000 to 48000 Hz. Under **Mixing** the memory access is selected is

These are the settings of the format Real Video.





You can playback sound from the sound card or (depending on the hardware) from the video card. It is important that the correct output medium is selected on the control panel of your PC.