

Getting Your FMV Right First Time

SCEE Technical Note

June 1998

Overview

I'm sure some of you are wondering why this has been included in the technical notes. Well just have a look at the FMV on the majority of games to see why, plus Developer Support gets calls on a daily basis with questions like 'Why does Tekken's FMV look good, and mine crap?'. Hopefully this should help, and reduce the amount of trial and error normally involved with making FMV.

NOTE: I'm assuming you have a version of Adobe Premiere, which I find is the easiest video package available, plus the latest version of MovConv, which is currently version 3.1. Although the others work I find that 3.1 offers better compression, plus runs much quicker than the Win3.1 version of MovConv. Also this is just concerned with the conversion process, either myself or Tom Oswald (SCEE Cambridge) will put together a doc for artists, with hints and tips.

Creating the AVI

This should really be done by an artist, and shouldn't be thrown at the PlayStation programmer at the last minute.

Get your series of tga's / tiff's etc and load them into Premiere. Try not to have too much red in any of the stills as this will end up looking crap on the PlayStation.

Set up the frame rate etc. I recommend using 15fps for most cases, using this method you can do full screen 320 / 256 with 37.8 kHz audio at 25fps, but 15fps offers higher quality visuals.

Compression settings:

- Compression Method – None
- Depth – Millions

Fps – set to the required frame rate

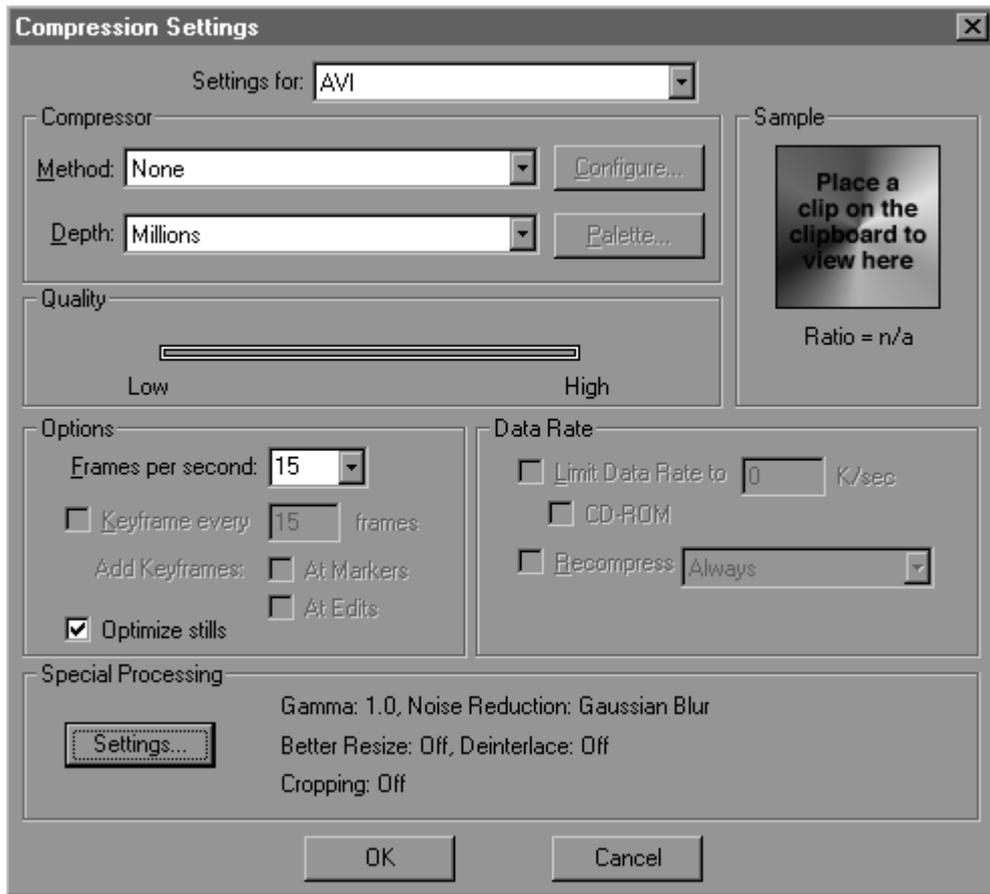
Set Optimise Stills

Special Processing

Settings – Noise Reduction – Gaussian Blur

I usually use a slight Gaussian blur on the complete AVI, this removes much of the noise found around different objects in the AVI. For higher quality I suggest you get your artist to add different blurs etc to different parts of the AVI to remove as many hard edges as possible.

Here's the setting I use.



When setting the output options make sure you disable the sound.

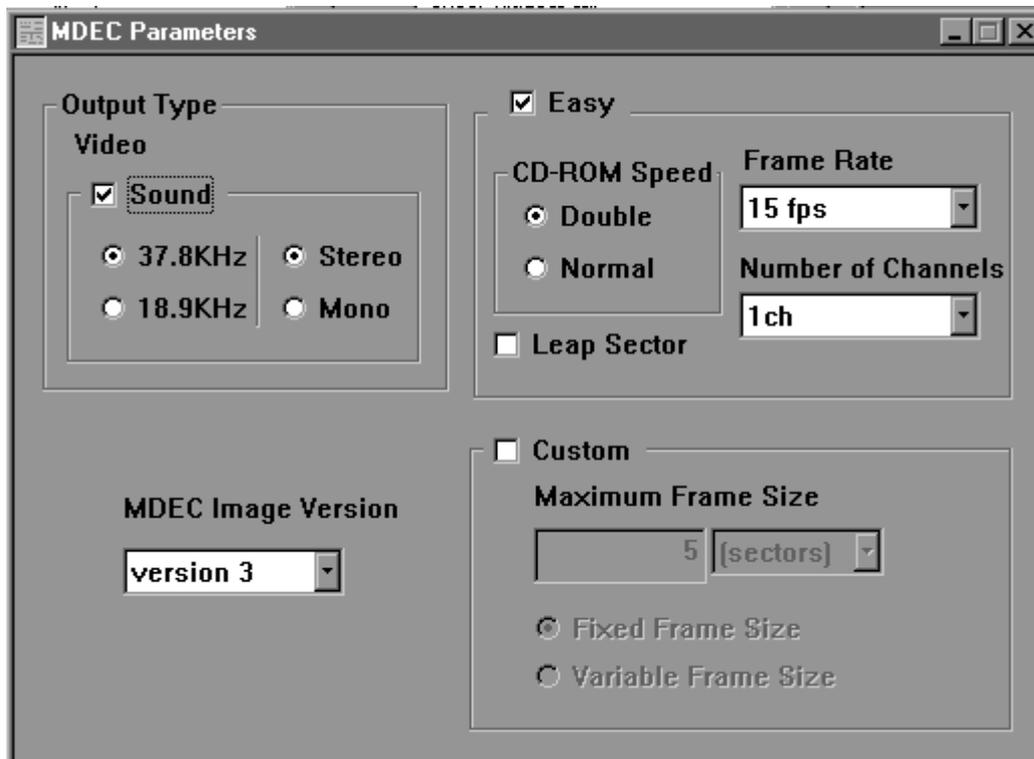
Converting the Sound

Simple really, get a 44 kHz stereo, 16-bit WAV, run MovConv and convert to an XA file with 37.8 kHz stereo settings.

Converting to a PlayStation Stream

Run MovConv and load in your uncompressed AVI

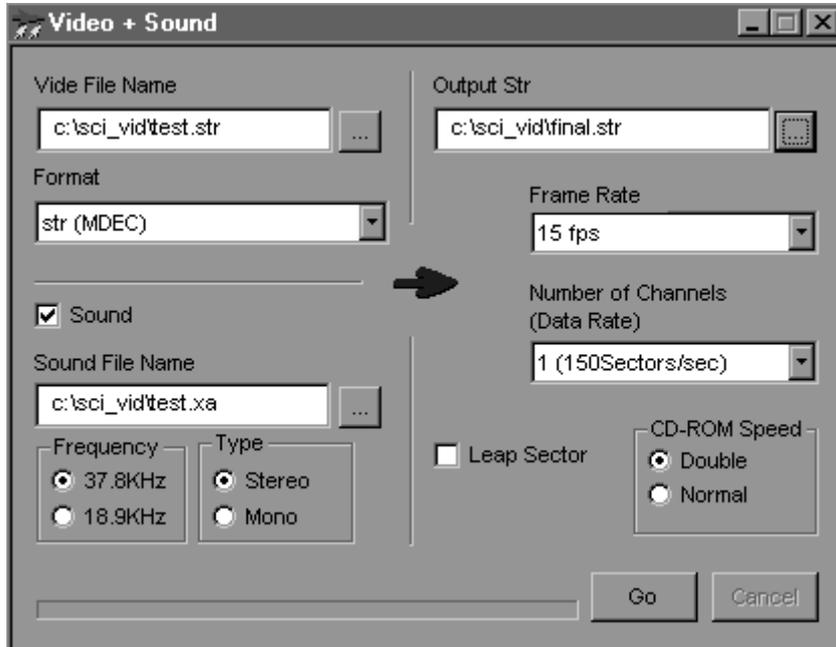
Use the following settings.



Always use MDEC image version 3, as this gives better compression. Even though the AVI has no sound you need to enable sound so that MovConv will leave space for your audio.

Interleaving Video and Sound

Easy one again. If you've done the above it's just simply a case of selecting your stream and WAV and click go. See below



Obviously if you're using a different frame rate / audio then change the settings accordingly.

Playback on the PlayStation

Full Screen streams should always be played back in 24-bit mode, this is another reason a lot of the FMV isn't up to scratch as it's being played back in 16bit mode. Don't bother writing you own streaming code, as there's some on the programmer tools CD that works just fine. In fact a modified version of this code is used in most of our in house projects. It can be found in `\psx\sample\scee\cd\movie2\`, or in the samples area of the web site.