## **SoftPEG™** MPEG Driver Configuration

## • Run Time Information

The Run Time Information is located in the rectangular box at the top of the SoftPEG Configuration Dialog. The Run Time Information displays the MPEG stream audio and video attributes and the video display mode.

## • Configuration Options

Use the Configuration Options to configure the audio and video playback of SoftPEG. Optimum performance is achieved through appropriate configuration. The Configuration Options are located in the boxes titled **Audio** and **Video** in the middle of the SoftPEG Configuration Dialog.

## • How to Access the Configuration Dialog

## **Run Time Information**

This section displays the AUDIO and VIDEO attributes of the MPEG stream (as defined in ISO-IEC/JTC1 SC29), as well as the video graphic DISPLAY mode. This is read-only information. The <u>Video Display</u> option changes the graphic display mode.

## **Configuration Options**

The Configuration Options allow you to adjust the audio and video performance of the SoftPEG decoder. These options are divided into two groups:

## • Audio Options

You can change the mode and quality of audio output. The Karaoke mode should be enabled if the encoded stream is Karaoke.

### Video Options

You can adjust the movie size, choose the display method of the video, and force the synchronization of video with audio by setting up the Video Options.

### CPU Utilization

The CPU Utilization sets the percentage of CPU time dedicated to the SoftPEG driver and its client application. The more CPU that SoftPEG uses, the less that is available to other applications.

### **Video Configuration Options**

• **Open Size** – allows you to choose the display window size when the movie is opened. You can then resize the display window after opening. If hardware scaling through **<u>DCI</u>** is not available, there will be a performance penalty for resizing. The options are:

#### 1xOriginal

Opens the window at the encoded size of the movie.

### 2xOriginal

Opens the window at double the encoded size of the movie. If hardware scaling through **DCI** is not available, this mode will play slower than **1xOriginal**.

#### Current

Does not resize the window. This is useful for playing back in loop mode. If hardware scaling through **DCI** is not available, this mode will play slower than **1xOriginal**.

• **Video Display** – allows you to choose the display method. The options are:

#### **Best Frame Rate**

Automatically chooses the most efficient method available on the system. SoftPEG will prefer **DCI**, **WinG** or **GDI** graphic APIs, in that order. In the same API, it will prefer formats with fewer colors.

#### **Best Picture Rate**

Automatically chooses the method which renders the best picture quality. SoftPEG will prefer **DCI**, **WinG** or **GDI** graphic APIs, in that order. In the same API, it will prefer formats with more colors.

#### 24 Bits

Uses the GDI 24-bit color mode. This mode uses up to 16.7 million distinct colors to provide photorealistic images. (This mode should only be used if you have a 24-bit graphic card.)

#### 8 Bits

Uses the GDI 8-bit color mode. This mode uses 256 distinct colors for the images.

#### **Gray Scale**

Uses the GDI Gray Scale display mode. This mode uses 256 distinct shades of gray for the images.

- **Synchronized Playback** enables the synchronization of the video with audio or with the system clock, if no audio is present.
- **Disabled** disables the video stream. This turns off decoding and displaying of the picture.

## **DCI** – Display Control Interface

DCI is a driver-level software interface which provides access to display devices while maintaining compatibility with Windows GDI. SoftPEG uses DCI to utilize hardware video acceleration features such as scaling and color space conversion in high-end video cards with DCI-compliant drivers. If hardware video acceleration through DCI is not available, SoftPEG will use either WinG or GDI, depending on the display mode.

# **GDI** – Graphics Device Interface

This is the default graphics system available on all Windows systems. If hardware video acceleration through DCI is not available, SoftPEG will use either WinG or GDI, depending on the display mode.

## WinG

WinG is a dynamic link library providing high-performance graphics under Windows and future Windows releases. If hardware video acceleration through DCI is not available, SoftPEG will use either WinG or GDI, depending on the display mode.

### **Audio Configuration Options**

- **Mono/Stereo** allows you to choose audio output mode. In Mono mode, the decoding will still be stereo, but the channels will be mixed to reduce output bandwidth. Mono requires less CPU usage than Stereo play.
- AM/FM allows you to choose audio quality. You can use this option to trade quality for speed.
- **Karaoke** enables Karaoke mode to decode a Karaoke-encoded stream. This applies only to Video CDs with Karaoke content. In Mono output mode, the Karaoke mode of SoftPEG will play the music, but not the Karaoke voice. In Stereo mode, the Karaoke mode will play music on the left channel and the Karaoke voice on the right. To balance voice and music, use a mixer utility, usually provided with the PC sound card.

You can mix your voice into the Karaoke audio by plugging a microphone into the PC sound card and using the mixer utility to combine the audio from the microphone with the audio from SoftPEG. Refer to the sound card manual for details on mixing microphone sound with WAVE data.

• **Disabled** — disables the audio stream. This turns off decoding and playing of the audio, and mutes the sound.

# **How to Access the Configuration Dialog**

The Configuration Dialog can be opened in various ways:

- From the **Control Panel** Program Group in the Program Manager, double-click the **Drivers** program icon. This will invoke the Drivers program, which displays a list of installed drivers. Select the CompCore SoftPEG driver and click the **Setup** button to bring up the Configuration Dialog.
- Select the **Configuration** item from the **Device** menu in **Media Player**. This menu item will not be available until an MPEG file has been opened from the Media Player.
- Send a **Configure** MCI command.