



MainConcept Motion-JPEG Codec v3.2.4

Introduction

The realtime MainConcept Motion-JPEG Codec v3.2.4 for Win32 v3.00 allows you to read as well as write analog video footage on your computer. The codec is optimized for MMX technology. It should be able to decode PAL/NTSC coded AVIs in near realtime.

The software codec contains a full-featured CODEC DLL (dynamic link library) for realtime encoding and decoding of Motion-JPEG (M-JPEG) coded AVIs.

It can decode Motion-JPEG (Movie-JPEG, MJPEG, MJPG) AVIs, created with Miro (DC10, DC20 and DC30), FAST, Matrox and similar cards; it can now also encode JPEGS in a Zoran compliant way, meaning that the above mentioned cards can also playback AVIs created by the Codec. It supports interleaved MJPEG both for decoding and encoding.

The Codec includes a realtime MJPEG encoder for Win32; we also included several improvements for doing realtime MJPEG capturing. We think that we are now the fastest MJPEG Codec out there, we can encode 640x480 in 30 fps (frames per second) on an P-II 300Mhz. New is the Zoran support which enables Zoran based MJPEG cards to playback AVIs coded with this codec.

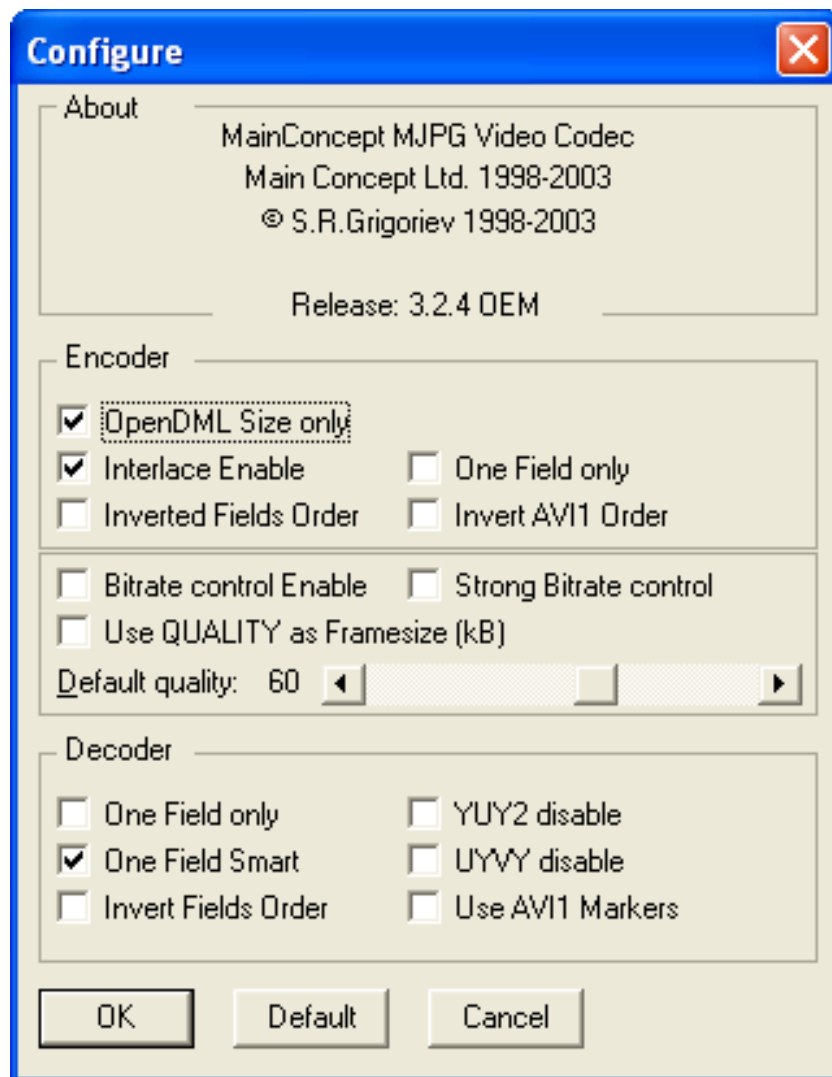
Installation

To install the MainConcept Motion-JPEG Codec, simply double-click the setup file, and follow the instructions on the screen. To unlock the codec you are requested to enter your personal serial number. If you do not enter a valid serial number, the demo version of the MJPEG Codec will be installed, which adds a watermark to your videos.

Note: Don't install this codec on a system which runs Motion-JPEG hardware, and the hardware uses the MJPEG Codec. Otherwise the software will overwrite the hardware codec so that the hardware will stop working properly.

The Settings window

You can open the MJPEG Codec settings window in the **Control panel** under **Sounds and Multimedia** (under Windows 2000; it depends on the operating system you use where to find the necessary information and settings window for the video codecs). In the window that appears, activate the **Hardware** pane and select **Video Codecs**. When you click the **Properties** button you will find detailed information about the codecs which are installed in your operating system. Select the MainConcept MJPEG Codec to get access to the codec's settings. After you have clicked **Properties** in the following window, the settings appear on the screen.



The codec's parameters are explained in detail below.

Note: It is not necessary that you change the settings of the Motion-JPEG Codec. Depending on your capture software some settings are not available or are displayed differently.

Under **Encoder** you find several options you can activate by selecting the appropriate checkboxes.

AVI files can be created with and without Open DML. When you activate **Open DML Size** you can process indices/files which are larger than 2 GBs.

Interlace Enable activates encoding in interlace mode. We recommend only using this option if you want to encode MJPEGs in a hardware compliant way.

The option **Invert Fields Order** is self-explanatory. It simply reverses the field order.

One Field only tells the codec to encode only one field. This is very useful for fast moving video segments.

When you activate **Invert AVI1 Order** the second field will be encoded first. This option is very useful because there are bugs in some hardware decoders. By adjusting this setting these bugs can be avoided.

In the center of the settings window you find some more options:

Activate **Bitrate control Enable** to set the bitrate.

When you activate the option **Use QUALITY as Framesize (kB)** you can adjust the target size and the compression rate of the compressed frames by using the quality slider in capture applications.

Strong Bitrate Control activates the two-pass encoding mode. It is useful when the necessary picture size has not been reached during the first round. The tolerance is normally around 15%.

Under **Default Quality** you specify the compression rate. A high value leads to a better quality but, unfortunately, to a higher file size as well.

Under **Decoder** you find several options you can activate by selecting the appropriate checkboxes.

One Field Only enables you to decode only one field of interlaced MJPEG AVIs, which is much faster than encoding both fields.

The option **One Field Smart** enables anti-aliasing for one field AVIs or for the **One Field Only** option.

The option **Invert Fields Order** is self-explanatory.

The encoder currently supports RGB16, RGB24, YUY2 and UYVY color spaces as input formats. It is possible to disable the YUY2 and UYUY color spaces by activating the **YUY2 disable** or **UYUY disable** checkboxes.

When you activate the **Use AVI1 Markers** checkbox, the markers in the AVI file's header are analyzed.

After you have adjusted all parameters, click the **OK** button to confirm the settings. Otherwise, press the **Cancel** button in order to abort the process. The **Default** button resets all parameters to their original status.

Technical Support

If you need assistance with our Motion-JPEG codec, visit the MainConcept website at **www.mainconcept.com** for troubleshooting advice, tips and tricks, discussion forums, and information on how to contact our support staff. Or send us an e-mail to the following address: *support@mainconcept.com*.

Note: Depending on your location, charges may apply for telephone technical support.

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