## Guide to Encoding WMV files from Canon HG10 24p MTS/M2TS files with Windows Media Encoder

1. After installing CoreAVC, drag the MTS/M2TS file into GraphEdit and check that it is using CoreAVC for Video Decoder and InterVideo (installed with Corel Apps CD that comes with the HG10) as the Audio Decoder. (If not as below, use DSFMgr.exe to change the merit of Decoder shown till you get it like below)



2. CoreAVC settings are as below ("No Deinterlacing" option is not available with v 1.6 so used Hardware instead)

CoreAVC Video Decode	er Properties		
Options Input Outp	out ]		
Č		CoreAVC P Copyright (c)	rofessional Version 1.6.0.0 2005-2007 CoreCodec, Inc. Licensed User
Input formats: v avc1 v AVC1 v h264 v H264 v x264 v x264 v X264 v SSH	Output formats: VYV12 VI420 VUY2 VUY2 RGB32 RGB24 RGB16 (565) RGB15 (555)	Input levels         TV (16-235)         PC (0-255)         Autodetect         Output levels         Output levels         TV (16-235)         PC (0-255)	Deinterlacing Weave Blend Bob Hardware Aggressive deinterlacing Crop 1088 to 1080 Force VMR AR correction Preferred decoder
OK Clo	se Apply He	:lp	

3. InterVideo Audio Decoder settings (Default)

InterVideo Audio Decoder Properties	
DVD Xpack	inter <mark>/ideo</mark> .
Audio channels	DOLBY         DIGITAL         Current audio track         Format:       AC3         Attributes:       16bit/48k/1ch
Vocal Options: <u>B</u> oth <u>L</u> eft	C <u>R</u> ight C <u>N</u> o vocal

4. In Windows Media Encoder start a new session of "Convert a File" type, on the Compression tap make the following settings -

<u>File View Control Tools H</u> elp
😒 New Session 🤌 🕞 🔽 Properties 🔹 😒 Start Encoding 🔘 Stop 🕕 Pause
Session Properties 🛛 🖄
Sources Output Compression Video Size Attributes Processing Plug-ins Security Advanced
Select the distribution method and encoding settings for your content. The distribution method you select determines the settings that are available.
Destination: (Custom)
Vide <u>o</u> : (Custom)
Audio: (Custom)
Details:       Audio encoding mode:       Quality VBR         Audience:       Quality-based         Audio codec:       Windows Media Audio 9.2         Audio format:       VBR Quality 98, 44 kHz, stereo VBR         Video codec:       Windows Media Video 9 Advanced Profile         Video size:       Same as video input         Frame rate:       29.97 fps         Key frame:       2 s         Video quality:       90
Two-pass encoding Time compression Properties
Apply Undo
Encoder ready

<u>N</u> ame: Desc <u>r</u> iption:		High defini	tion qua	ality audio (VBR) / High definition qualit	I <u>m</u> port Export
Language:		English (Ur	nited St	rates) [en-us]	Ne <u>w</u>
- Media types		Mode		Codec	
🔽 Audio	Quality	VBR	-	Windows Media Audio 9.2	•
✓ Video	Quality	VBR	•	Windows Media Video 9 Advanced Pr	ofile 💌
<b>— •</b> • • •					
Target bit rate:	s				
Target bit rate: Quality-based	\$				A <u>d</u> d <u>E</u> dit Dejete
Target bit rate: Quality-based Video format:		O N <u>I</u> SC (	29.97/:	30 fps) O <u>P</u> AL (25 fps) O C <u>u</u>	A <u>d</u> d Edit Dejete

✓ideo size:       ✓ Same as video input         Frame rate:       29.97       fps       Key frame interval:       2         Video guality:       90       (0 to 100)	sei
Erame rate:     29.97     fps     Key frame interval:     2       Video guality:     90     (0 to 100)	sec
Video guality: 90 (0 to 100)	
,	
Script bit rate: bps	
Video bit rate: Quality-based Audio bit rate: Quality-based	
Script bit rate: Overhead: Quality-based	

5. In the Processing Tab, select an IVTC method. In this file's case the "BC-Top" method turned out to be the correct method but the method in every file can be different. You will need to try encoding a small file (Use the "limit by duration" checkbox and set it to 3 sec) by each method to find the right one.

<u>File V</u> iew <u>C</u> ontrol <u>T</u> ools <u>H</u> elp	
🔮 New Session 🤌 🔚 🛛 🖓 Properties 🔹 😒 Start	Encoding 🔘 Stop 🕕 Pause
Session Properties	×
Sources Output Compression Video Size Attributes	Processing Plug-ins Security Advanced
Select the options you want to use to improve the quality	of your encoded content.
Video	
	Pixel format: (default)
C Income BC Top	
Inverse telecine     De rop	
	_
Detect	Flip vertically
Audio	
Voice codec optimization:	5.1 audio (fold down to stereo):
$\mathbf{C}$ Varice only	Surround channel: -3 dB
C Audio with voice emphasis	Cente <u>r</u> channel: -3 <b>dB</b>
Optimization definition file:	Sub <u>w</u> oofer channel: -12 dB
Browse	
	Apply Undo
Encoder ready	

Session Properties				2
Sources Output Compress	ion 🛛 Video Size	Attributes Processing	)   Plug-ins   S	ecurity Advanced
Select how you want to distribute your encoded content. You can broadcast it, store it in a file, or both.				
Push to server (the con	nection is initiate	ed by the encoder)		,
<u>S</u> erver name:	(Server name	:Port) - Port is optional		
Publishing point:	(Publishing po	pint name)		L Auto remove
Copy settings from:	(Use default p	publishing point settings)		
Pull from <u>encoder</u> (the c	onnection is initi	iated by the server or play	vers)	
Port nu <u>m</u> ber:	8080	Find Free Port		
Encode to file				
File <u>n</u> ame:	C:\00010_1_	AA-Top.wmv		Br <u>o</u> wse
Limit by size:	1024 KB	[		
Limit by duration:	00:00:00	(hh:mm:ss)		✓ Inde <u>x</u> file
Warn on low disk space:	10 bytes			
			Apply	Undo

How to tell which IVTC method is right? Check the 3 sec clip, if it's done with the right IVTC method there will be no combing in moving objects in the scene. If it's wrong there will be visible combing.

This is the wrong method –



This is the right method -



Another way to tell is the file size. If all the clips are 3 sec long the smallest one tends to be the right one. In the case below  $-00010_4$  CD-Top.wmv file done with the CD-Top method is the smallest.

🚞 Camcorder		
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites	<u>T</u> ools <u>H</u> elp	
🛛 🕞 Back 👻 🌍 👻 🏂 🎾	🕽 Search 🦻 Folders 🛛 🎹 📲 👗 📘	
Address 🗀		💌 🄁 Go
	🔺 Name 🔺	Size Type
File and Folder Tasks 🛛 😤	DSFMgr	File Folder
🤭 Maka a pow folder	🗀 GraphEdit	File Folder
	© 00010.MTS	174,594 KB MTS File
Publish this folder to the	🗿 00010_1_AA-Top.wmv	4,627 KB Windows Media Aud.
Web	00010_2_BB-Top.wmv	4,686 KB Windows Media Aud.
	00010_3_BC-Top.wmv	3,440 KB Windows Media Aud.
Other Places 🕆	00010_4_CD-Top.wmv	2,567 KB Windows Media Aud.
	00010_5_DD-Top.wmv	3,615 KB 🛛 Windows Media Aud. 👻
C_Store		
32 objects	2	57 MB 😜 Internet 🥼

6. Once you have found the right IVTC method remove the "limit by duration" option in the Output tab and encode the whole file.

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