

Codec performance per Channel versus CPU usage

Playback file specs	Output 1080i50 PAL			Output 1080i50 NTSC		
	CPU 4790K	CPU 7700K	CPU 8700	CPU 4790K	CPU 7700K	CPU 8700
	PM 11000	PM 12000	PM15000	PM 11000	PM 12000	PM15000
MXF HD NTSC MPEG-2 48Mbs PCM 1152Kbs 48KHz 8Ch	15%	12%	11%	17%	13%	12%
MXF HD PAL MPEG-2 47Mbs PCM 1152Kbs 48KHz 8Ch	17%	12%	10%	19%	13%	11%
QuickTime HD NTSC H.264 11Mbs AAC 384Kbs 48KHz 2Ch	17%	12%	10%	19%	13%	11%
MXF HD PAL H.264 108Mbs PCM 1152Kbs 48KHz 8Ch	19%	15%	13%	21%	17%	14%
GXF HD NTSC H.264 11Mbs PCM 768Kbs 48KHz 2Ch	11%	8%	8%	12%	9%	9%
MXF HD NTSC H.264 108Mbs PCM 1152Kbs 48KHz 8Ch	21%	17%	14%	23%	19%	15%
QuickTime HDR NTSC H.264 3Mbs AAC 192Kbs 44KHz 2Ch	9%	7%	6%	10%	8%	7%
QuickTime 4K 23.97fps H.264 1Mbs AAC 126Kbs 44KHz 2Ch	23%	17%	14%	25%	19%	15%
MXF 1280x1080 NTSC DV 110Mbs PCM 1152Kbs 48KHz 8Ch	14%	11%	10%	15%	12%	11%
MPEG-TS HD NTSC H.264 24Mbs MP2 256Kbs 48KHz 4Ch	15%	12%	9%	17%	13%	10%
MXF 720x512 NTSC MPEG-2 48Mbs PCM 9216Kbs 48KHz 8Ch	11%	8%	7%	12%	9%	8%
MXF 720x608 PAL MPEG-2 48Mbs PCM 6144Kbs 48KHz 8Ch	11%	8%	7%	12%	9%	8%
QuickTime HD PAL H.264 18Mbs AAC 125Kbs 48KHz 2Ch	10%	8%	7%	11%	9%	8%
QuickTime HD NTSC ProRes 217Mbs PCM 1536Kbs 48KHz 2Ch	38%	30%	25%	42%	33%	28%
MPEG-PS HD PAL MPEG-2 24Mbs MP2 384Kbs 48KHz 2Ch	9%	6%	6%	10%	7%	7%
VR HD NTSC MPEG-2 48Mbs PCM 1536Kbs 48KHz 2Ch	15%	10%	9%	17%	11%	10%
MXF 1440x1080 NTSC H.264 53Mbs PCM 768Kbs 48KHz 16Ch	18%	12%	11%	20%	13%	12%
MXF 1440x1080 PAL DV 110Mbs PCM 768Kbs 48KHz 16Ch	12%	9%	10%	13%	10%	11%
MXF HD PAL MPEG-2 48Mbs PCM 768Kbs 48KHz 16Ch	10%	7%	6%	11%	8%	7%
MXF 720x608 PAL MPEG-2 48Mbs PCM 6144Kbs 48KHz 8Ch	11%	8%	7%	12%	9%	8%
Matroska 704x576 PAL H.264 1Mbs AAC 48KHz 2Ch	8%	6%	6%	9%	7%	7%
MPEG-PS HD NTSC MPEG-2 19Mbs ATSC 384Kbs 48KHz 2Ch	10%	8%	7%	11%	9%	8%
QuickTime SD NTSC ProRes 59Mbs PCM 1536Kbs 48KHz 2Ch	16%	13%	10%	18%	14%	11%
QuickTime HD 23.97fps H.264 7Mbs AAC 320Kbs 48KHz 2Ch	10%	6%	6%	11%	7%	7%
Matroska 1920x960 PAL HEVC 4Mbs AAC 48KHz 2Ch	15%	13%	10%	17%	14%	11%
MPEG-PS SD PAL MPEG-2 1Mbs ATSC 192Kbs 48KHz 2Ch	10%	8%	7%	11%	9%	8%
MXF HD NTSC MPEG-2 48Mbs PCM 1152Kbs 48KHz 8Ch	14%	10%	10%	15%	11%	11%
MXF HD PAL MPEG-2 48Mbs PCM 1152Kbs 48KHz 8Ch	12%	10%	8%	13%	11%	9%
QuickTime HD PAL VC3/DNxHD 175Mbs PCM 1536Kbs 48KHz 2Ch	14%	11%	9%	15%	12%	10%
Captured file codec	1080i50 fast video PAL			1080i50 fast video NTSC		
	CPU 4790K	CPU 7700K	CPU 8700	CPU 4790K	CPU 7700K	CPU 8700
	PM 11000	PM 12000	PM15000	PM 11000	PM 12000	PM15000
Prores	69%	54%	42%	83%	65%	50%
DNXhd	27%	20%	19%	32%	24%	23%
DVCPRO HD MOV	51%	39%	32%	61%	47%	38%
H264 opencisco	22%	19%	12%	26%	23%	14%
MPEG 2	21%	17%	16%	25%	20%	19%
XDCAM 50	33%	26%	25%	40%	31%	30%

% are per channel - Never exceed 80-85 % CPU load