Recommended video encoding settings

This article gives you detailed information about the recommended video encoding settings for Symbian^3, Symbian^1, MeeGo 1.2 Harmattan, and Series 40.

720p for Symbian^3 with HDMI out

Container

MP4, optional MKV. Note that Nokia Ovi Suite does not support the Matroska/MKV format.

Video

Format	AVC / H.264
Profile	High Profile, Level 3.1
Resolution	1280x720 (16:9)
Frame rate	30 FPS
Bit rate	Up to 12 Mbps for short videos (3 Mbps for long movies)
Max number of reference frames	4. It is likely that with future Symbian releases, the limitation for the number of reference frames will be relaxed.
Max number of B-frames	1
I-frame interval	1 s
Video streaming support	Yes, with MP4 and MPEG-4 AAC-LC. Bit rate is limited to 3 Mbps. When streaming over a WCDMA network with a 384 kbps connection, the bit rate is limited to ~360 kbps for combined audio and video.

Audio

Format	MPEG-4 AAC-LC
Channels	2 (stereo)
Sample rate	48 kHz
Bit rate	160 kbps variable bit rate

Optional audio encoding format instead of the above (MKV as a preferred container)

Format	AC3 / eAC3 (Dolby Digital). Note that Nokia Ovi Suite does not support Dolby de/encoders.
Channels	5.1 Surround
Sample rate	48 kHz
Bit rate	192 kbps

360p for Symbian^3

Container

MP4

Video

Format	AVC / H.264
Profile	High Profile, Level 3
Resolution	640x360 (16:9) / 640x480 (4:3)

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Frame rate	30 FPS
Bit rate	Up to 6 Mbps for short videos (2 Mbps for long movies)
Max number of reference frames	5
Max number of B-frames	1
I-frame interval	1 s
Video streaming support	Yes, with MP4 and MPEG-4 AAC-LC. Bit rate is limited to 3 Mbps. Nokia 500 is limited to VGA 15 FPS with 2 Mbps. When streaming over a WCDMA network with a 384 kbps connection, the bit rate is limited to ~360 kbps for combined audio and video.

Audio

Format	MPEG-4 AAC-LC
Channels	2 (stereo)
Sample rate	48 kHz
Bit rate	160 kbps variable bit rate

360p for Symbian^1 (S60 5th Edition)

Container

MP4

Video

Format	MPEG-4
Profile	Simple Profile, Level 4a
Resolution	640x360 (16:9) / 640x480 (4:3)
Frame rate	30 FPS
Bit rate	4 Mbps
Max number of reference frames	N/A
Max number of B-frames	N/A
I-frame interval	1 s
Video streaming support	Yes, bit rate limited to 3 Mbps. Nokia C5-03 is limited to VGA 15 FPS with 2 Mbps. When streaming over a WCDMA network with a 384 kbps connection, the bit rate is limited to ~360 kbps for combined audio and video.

Audio

Format	MPEG-4 AAC-LC
Channels	2 (stereo)
Sample rate	48 kHz
Bit rate	160 kbps variable bit rate

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MeeGo 1.2 Harmattan / Nokia N9-00

Container

MP4, optional MKV. Note that Nokia Ovi Suite does not support the Matroska/MKV format.

Video

Format	H.264
Profile	Baseline Profile, Level 3.1
Resolution	854x480 (16:9) / 640x480 (4:3)
Frame rate	30 FPS
Bit rate	4 Mbps. When streaming over a WCDMA network with a 384 kbps connection, the bit rate is limited to ~360 kbps for combined audio and video.
Max number of reference frames	As per H.264 standard
Max number of B-frames	As per H.264 standard
I-frame interval	1 s
Video streaming support	Yes, with MP4 and MPEG-4 AAC-LC. When streaming over a WCDMA network with a 384 kbps connection, the bit rate is limited to ~360 kbps for combined audio and video.

Audio

Format	MPEG-4 AAC-LC
Channels	2 (stereo)
Sample rate	48 kHz
Bit rate	160 kbps variable bit rate

Optional audio encoding format instead of the above (MKV as a preferred container)

Format	AC3 / eAC3 (Dolby Digital). Note that Nokia Ovi Suite does not support Dolby de/encoders.
Channels	5.1 Surround
Sample rate	48 kHz
Bit rate	192 kbps

Series 40

NOTE: This profile is compatible with products that include a QVGA display, QVGA or above video capabilities, and support for video streaming. For relevant device specifications, see Device specifications on the Nokia Developer website.

Container

MP4

Video

Format	MPEG-4
Profile	Simple Profile, Level 3
Resolution	320x240 (4:3)
Frame rate	30 FPS

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Bit rate	384 kbps
Max number of reference frames	N/A
Max number of B-frames	N/A
I-frame interval	1 s
Video streaming support	Yes. When streaming over a WCDMA network with a 384 kbps connection, the bit rate is limited to ~360 kbps for combined audio and video.

Audio

Format	MPEG-4 AAC-LC
Channels	2 (stereo)
Sample rate	48 kHz
Bit rate	128 kbps variable bit rate

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