Codec Selection Cheat Sheet 2026

Pick the right codec ladder for OTT, live, WebRTC, surveillance, or broadcast.

Companion to article 3.12 - decision tree. Print on A4 or US Letter, hand to your team. Fora Soft Learn / Video Encoding

Five use cases, five ladders

Use case	Codec ladder	Why this ladder
OTT / VOD	H.264 + HEVC + AV1	Universal fallback; Apple 4K; royalty-free top tier
Live streaming	Same, faster presets	x264 veryfast / x265 fast / SVT-AV1 preset 8
WebRTC / calls	VP9 + VP8 + H.264	Latency under 100 ms; AV1 selective; simulcast over SVC
Surveillance	H.264 + H.265	Storage drives the math; AV1 SoC support 2028+
Broadcast	VVC + LCEVC (Brazil) / HEVC (ATSC)	National-standard mandate; hardware decode required

Five questions that decide the ladder

1. Device mix	Over 30% Apple? Keep HEVC. Under 30%? Drop HEVC, run H.264 + AV1.
2. Latency	Under 400 ms WebRTC; 2-10 s LL-HLS / CMAF-LL; over 10 s regular HLS / DASH.
3. Premium 4K HDR	Apple TV HDR target? HEVC at top of ladder, full stop.
4. Patent tolerance	Royalties under 1% revenue: ship HEVC. Over 5%: drop HEVC, ship AV1.
5. Encoding budget	Tight: SVT-AV1 preset 8 or 9. Generous: preset 5 or libaom.

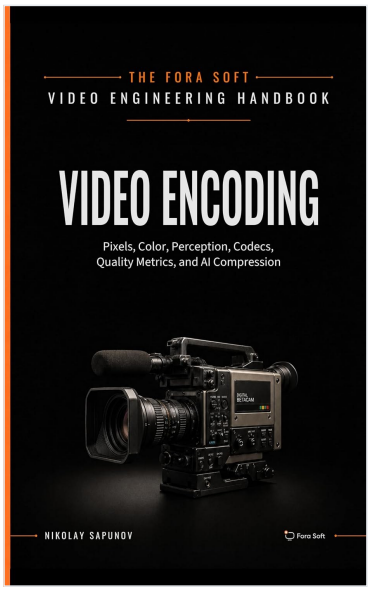
Numbers you need

H.264 adoption	84% production (NETINT 2026 survey, 286 respondents)
HEVC adoption	65% production + 20% planning
AV1 adoption	17% production + 40% planning (231% YoY growth in plans)
Netflix AV1 share	approx 30% of streaming traffic (December 2025)
YouTube AV1 share	approx 75% of high-resolution traffic
Real-world savings	HEVC: 30-40% off H.264 / AV1: 25-35% off HEVC
HEVC pool rate change	Access Advance +25% for new licensees, Jan 1 2026
H.264 pool rate change	Via LA tiered cap up to $4.5M / year for new licensees

Three pitfalls to avoid

One codec is enough	False at scale - the three-codec ladder pays back in months.
Lab benchmarks transfer	False - production savings are 60-75% of headline lab numbers.
Forgetting the player	A ladder is useless without capability detection in the client.

Companion to: 'How to Choose a Codec for Your Service in 2026'
www.forasoft.com/learn/video-encoding/articles/choose-codec-2026



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This sheet maps five use cases to five codec ladders and gives you the questions and numbers to defend the choice. Volume 1 explains the trade-offs behind each ladder: how H.264, HEVC, AV1 and VP9 differ, encoder presets against compute budget, rate control for live and VOD, and how to measure savings on your own content.

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Choosing the codec ladder for an OTT, live or WebRTC product?

We will run your use case through the five questions, test the candidate ladder on your content and devices, and price encode, licensing and CDN for each option. 250+ video products shipped since 2005.

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