

The Cost of Codecs: Royalty-Bearing Video Compression Standards and the Road that Lies Ahead

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Codec	Licensing Organization	Per-Device Royalties		Per-Title Royalties		Subscription-Based Royalties		Free/Public Over-the-Air Broadcast	Internet Broadcast	Per-Organization, Yearly Cap for all Royalties
		Royalty	Yearly Cap	Royalty	Yearly Cap	Royalty	Yearly Cap			
MPEG-2	MPEG-LA	Originally, \$2.50/unit. Now, \$0.50/unit or less.	None	None	None	None	None	None	None	None
MPEG-4 (AVC)	MPEG-LA	\$0.10-\$0.20/unit depending on volume. No royalty for volumes less than 100,000 units.	2011-2015, \$6.5M. As of 2016, \$9.75M	Lesser of \$0.02 or 2% of title sale value	None	\$25,000-\$100,000 per year depending on number of subscribers. No royalty for organizations with less than 100,000 subscribers.	None	One-time fee of \$2500/encoder OR \$2500-\$10,000 per year based on number households in broadcast area	None	2011-2015, \$6.5M. As of 2016, \$9.75M
HEVC	MPEG-LA	\$0.20/unit. No royalty for volumes less than 100,000 units	\$25M	None	None	None	None	None	None	None
	HEVCAdvance	\$0.40-\$1.20/unit depending on volume. Additional \$0.10-\$0.75/unit for higher HEVC profiles.	\$20M-\$30M (Mobile) \$20M (Other Devices) \$20M (4K UHD+ TVs)	\$0.025/unit	\$2.5M	\$0.005 per subscriber, increasing to \$0.025 by 2020	\$2.5M	None	None	\$5M (Per-Title and Subscription-Based) \$40M (Devices)