

## The one fact

Lossless returns the original audio exactly. All three formats sound identical - so the choice is platform and container, never sound quality.

## The three formats at a glance

Format	Status	Container	2026 home	Special trait
<b>FLAC</b>	IETF RFC 9639 (open)	.flac / fMP4	Tidal, Qobuz, Amazon	Built-in MD5 check
<b>ALAC</b>	Apache 2.0 (open '11)	MP4 / .m4a	Apple Music Lossless	Native to Apple
<b>WavPack</b>	Open source	.wv (+ .wvc)	Mastering, archival	Hybrid lossy+correction

## What to remember

- Lossless = exact** Decode returns the original bit-for-bit. Lossy (AAC/Opus) discards detail for good.
- Size cost** Lossless runs ~5-7x larger than a transparent lossy stream (~800 vs ~128 kbit/s).
- All sound the same** FLAC, ALAC, WavPack are all bit-exact - choose by platform/container, not quality.
- Size is near-equal** FLAC ~61% and WavPack ~61% of original; ALAC a touch larger and slower to decode.
- FLAC reach** 1-8 channels, up to 1,048,575 Hz, 4-32 bits - it will never be too small for your audio.

### Pitfall: shipping lossless to listeners who cannot hear the difference

On phones, laptops, and earbuds, listeners cannot tell lossless from transparent lossy in a blind test. Keep masters lossless, deliver lossy; reserve lossless for an opt-in music tier.