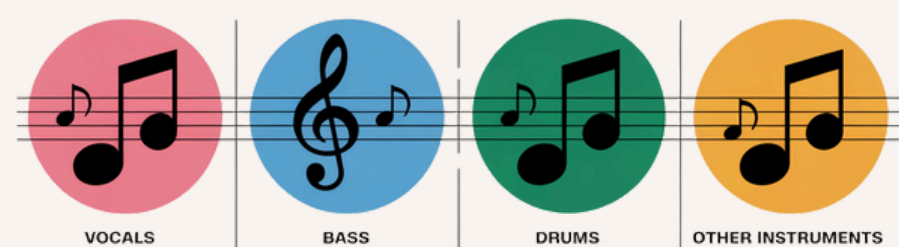# FIND THE BEST AI TOOLS FOR
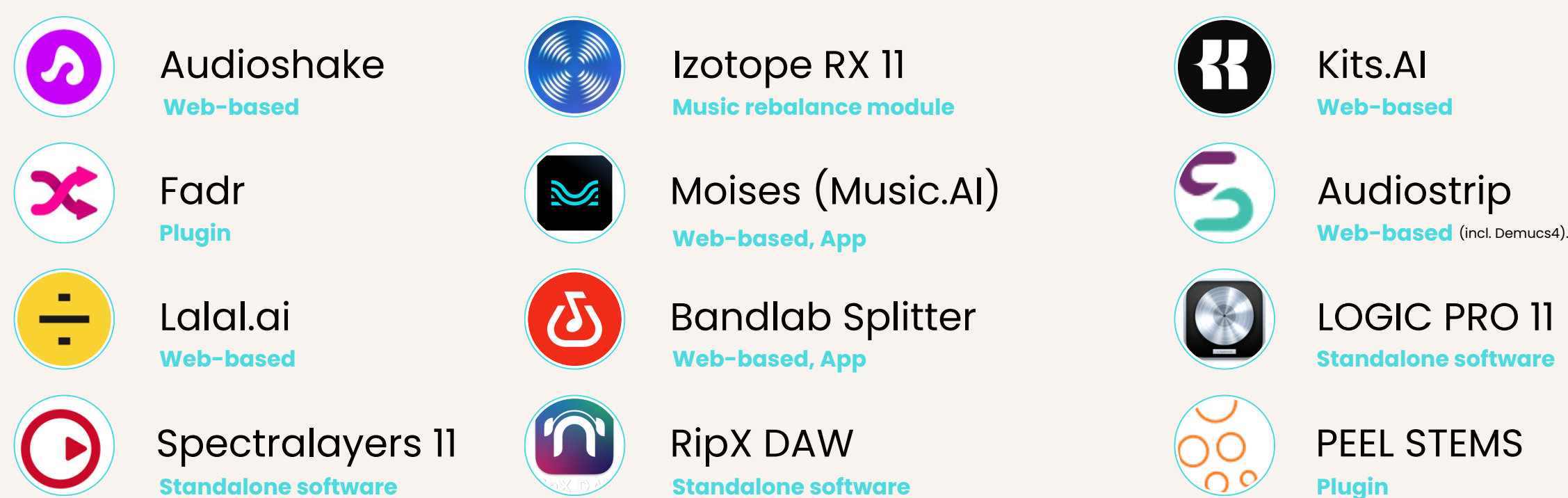# STEM SEPARATION

01 HOW DOES IT WORK?

Stem separation is the **process of extracting individual audio elements**, such as vocals, drums, and bass, from a fully produced song. It allows musicians to isolate specific components for remixing.

VOCALS | BASS | DRUMS | OTHER INSTRUMENTS

02 USE CASES

✓ Professional remixing
✓ Live performance enhancement
✓ Karaoke production
✓ Film scoring
✓ Sample creation

✓ Voice-over production
✓ Audio restoration
✓ Educational analysis
✓ Custom backing tracks
✓ Content creation

03 TOOLS

Audioshake — Web-based
Fadr — Plugin
Lalal.ai — Web-based
Spectralayers 11 — Standalone software

Izotope RX 11 — Music rebalance module
Moises (Music.AI) — Web-based, App
Bandlab Splitter — Web-based, App
RipX DAW — Standalone software

Kits.AI — Web-based
Audiostrip — Web-based (incl. Demucs4).
LOGIC PRO 11 — Standalone software
PEEL STEMS — Plugin

04 SPLITTING CHART

AI stem splitting tools vary in their capabilities to separate music into tracks, ranging from basic to sophisticated isolation. Choose your ideal stem splitter based on your needs.

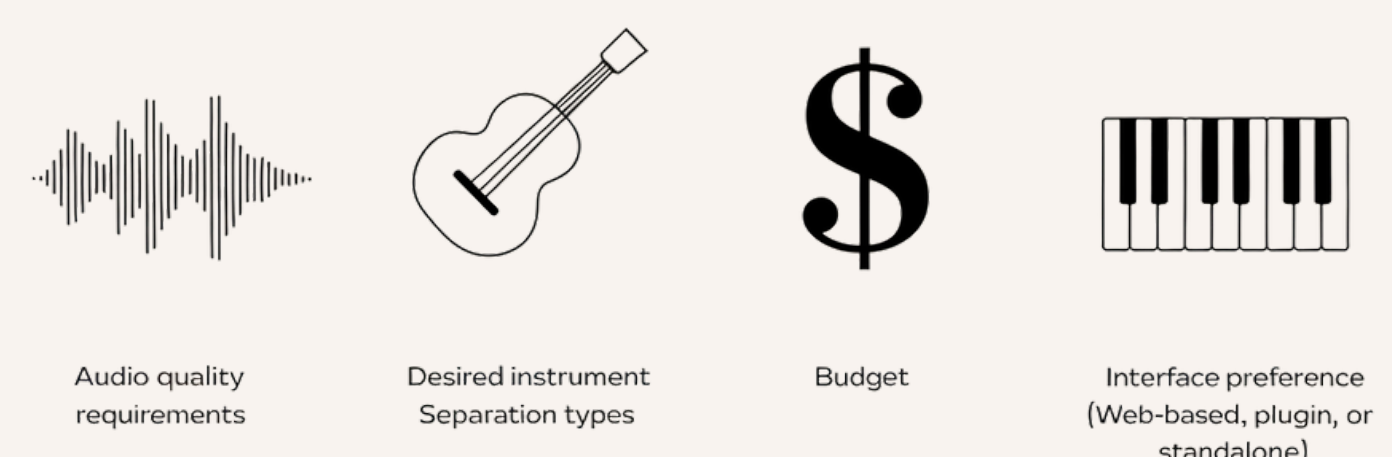| Stems	Music.AI	Logic Pro 11	Spectralayers 11	RX11scope	Lalal.ai	Demucs	Fadr	Audioshake
Vocals								
Bass								
Drums								
Other								
Guitar								
Piano								
Keys								
Wind								
Strings								
Electric Guitar								
Acoustic Guitar								
Kick								
Snare								
Toms								
Hi-hat								
Cymbals								
Cinematic Separation								
Guitar Solo/Rhythm								

Chart created by Music.AI

05 Source Separation Benchmark

Signal-to-Distortion Ratio (SDR) measures how cleanly AI separates instruments from songs, with higher numbers suggesting better separation quality. Note that SDR score, while useful, is only one measure of quality, and does not always reflect the best "sounding" model. So try these tools out for yourself and compare!

Source Separation Benchmark - SDR Boxplot - MUSDB18HQ

Music.ai
Logic Pro
Spectralayers pro 11
Izotope - RX11
Lalal.ai
Demucs4
Fadr
Audioshake
Kits.ai

Chart provided by Music.AI. Results of an SDR benchmarking study:
https://music.ai/blog/research/source-separation-benchmarks/

Refers to MUSDB18-HQ:
https://paperswithcode.com/sota/music-source-separation-on-musdb18-hq

06 Pick your AI splitter:

Match your audio quality needs, desired instrument separation, budget, and preferred interface type (web, plugin, or standalone) to find the ideal AI stem splitting solution for your projects.
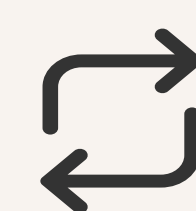
Audio quality requirements | Desired instrument Separation types | Budget | Interface preference (Web-based, plugin, or standalone)