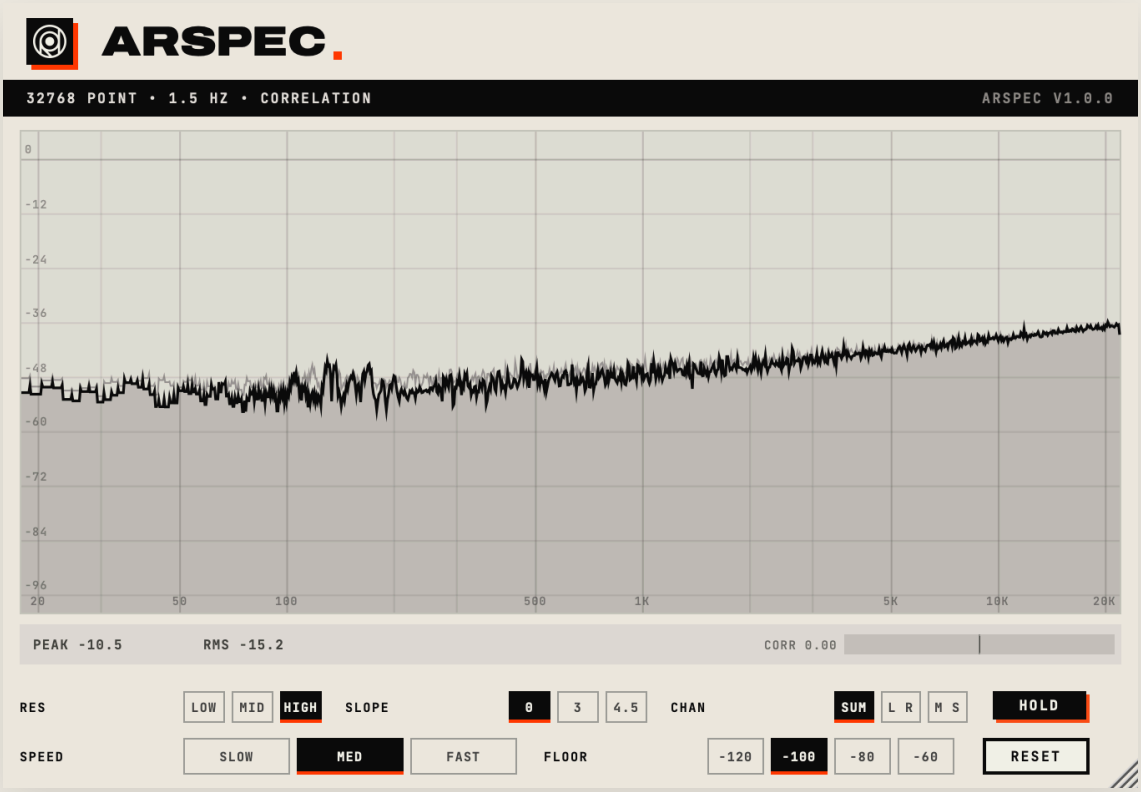
AJANSS RECORDS

ARSPEC

SPECTRUM ANALYSER



VERSION	FORMATS	PLATFORMS	DOCUMENT
1.0.0	AU · VST3	macOS · WINDOWS	USER GUIDE

01 WHAT IT DOES

ARSPEC shows the spectrum. Thirty-two thousand points — 1.5 Hz apart at 48 kHz — drawn across a thousand display bins, with a peak-hold trace, a tilt, three channel views and a cursor that tells you the frequency, the level and the nearest note.

It listens; it does not process. The output is bit-for-bit identical to the input — the difference is exactly 0.000, measured on every build rather than claimed. Zero latency, nothing to compensate.

It is not ARMETER. ARMETER measures loudness to EBU R128 and gives you numbers; its spectrum is a thin strip under them. ARSPEC is the curve itself. The two sit side by side without showing you the same thing twice.

02 INSTALLING

macOS

Run ARSPEC Installer.pkg and follow the steps. The package is signed and notarised by Apple, so it opens normally.

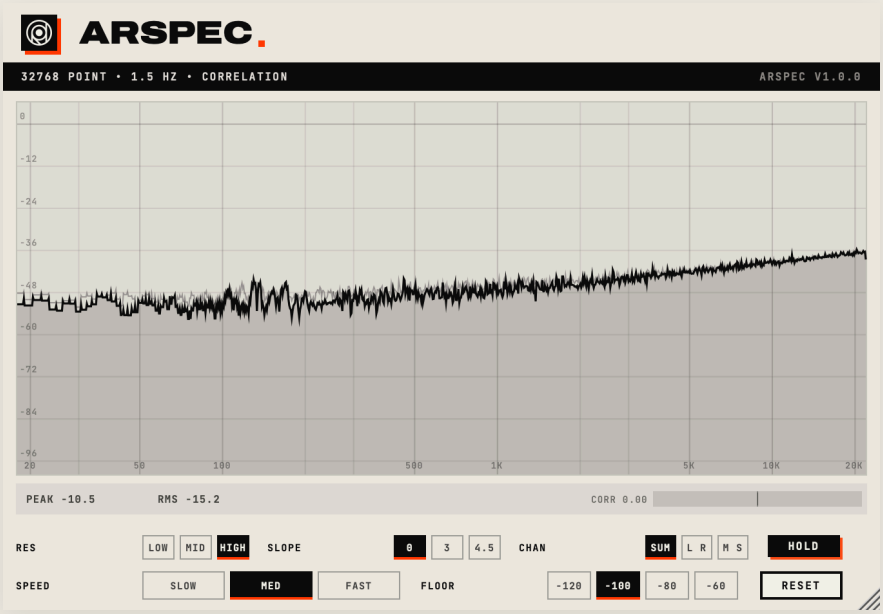
Windows

Run ARSPEC Installer.exe. The plugin is placed in the shared VST3 folder. The installer is not codesigned yet, so SmartScreen may warn you once: More info, then Run anyway.

After installing

Rescan the plugin list in your DAW. ARSPEC appears under Ajanss Records › ARSPEC. Requirements — macOS 10.13 or newer, Intel or Apple Silicon. Windows 10 or newer, 64-bit.

03 THE INTERFACE



THE CURVE	Filled when one trace is shown, drawn as two lines in L R and M S. The faint line above it is the peak hold.
CURSOR	Move the mouse over the display: frequency, level and the nearest note. Reading a resonance as B3 rather than 247 Hz is usually the faster way to act on it.
GRID	Decade lines from 20 Hz to 20 kHz, and twelve-decibel steps down to the floor you chose.
LEVEL STRIP	Peak with a 1.5 second hold, RMS over 400 ms, and correlation from -1 to +1. The correlation bar turns orange below zero: the two channels are cancelling and the material will lose energy in mono.

04 PARAMETERS

CONTROL	RANGE	DEFAULT	WHAT IT DOES
RES	LOW / MID / HIGH	**HIGH**	The analysis window: 2048, 8192 or 32768 samples — 23.4, 5.9 or 1.5 Hz at 48 kHz. A longer window resolves closer tones; a shorter one follows changes faster.
SLOPE	0 / 3 / 4.5 dB/oct	**0**	Tilts the display upward with frequency so detail at the top reads more easily. See the note on the next page before you assume 4.5 flattens pink noise here.
CHAN	SUM / L R / M S	**SUM**	One curve for the sum, or two overlaid: left and right, or mid and side.
SPEED	SLOW / MED / FAST	**MED**	How quickly the curve falls back. SLOW is easier to read on sparse material, FAST follows transients.
FLOOR	-120 / -100 / -80 / -60	**-100 dB**	How far down the display reaches. A shallower floor magnifies what is near the top.
HOLD	on / off	**on**	Draws the peak-hold trace above the live curve.

05 MEASURED

LEVEL	**0.01 dB**
Worst error reading a full-scale sine, over 100 Hz, 440 Hz, 1 kHz, 4 kHz and 10 kHz. A full-scale sine reads 0.0 dBFS, not "about right".	
RESOLUTION	**57.7 dB**
Valley between 1000 and 1030 Hz played together, at RES HIGH. At RES LOW the same pair leaves 0.7 dB.	
SLOPE	**4.500 dB/oct**
Shift of a line fitted to pink noise between the 0 and 4.5 settings. Exactly the stated amount.	
CORRELATION	**+1.000 / -1.000**
PASSTHROUGH	**0.000**
LATENCY	**0 samples**
PROCESSOR	**0.01 %**
Of one core on the audio thread; the transform runs on the message thread.	

06 ABOUT SLOPE AND PINK NOISE

A 4.5 dB per octave tilt is often said to make pink noise draw a flat line. That holds for analysers whose bins are equally wide in hertz. This display is logarithmic, so pink noise is already close to flat at SLOPE 0 — measured -0.56 dB per octave between 1 and 10 kHz. The tilt is here to enlarge the top end, not to correct anything.

07 SUPPORT

Questions and bug reports: Instagram @ajanssrecords. Please include your operating system, your DAW and its version, the plugin format, and the version shown in the top right of the window.