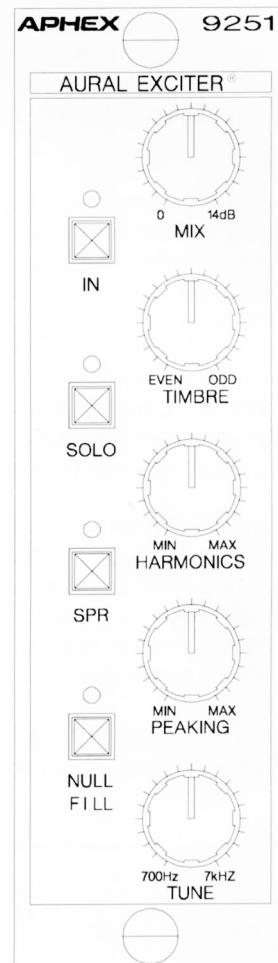


The Aural Exciter is an audio processor that provides many benefits to the end user, including greatly improved presence and intelligibility without altering any other part of the audio system. The 9251 installs in one input module space of the Aphex Model 9000 rack or compatible dbx 900 Series rack.

“SPR”™ (Spectral Phase Refractor) restores bass clarity and punch without any increase in amplitude by adjusting the phase relationship of the fundamentals to the harmonics.

The “Drive” control of previous Aural Exciters has been eliminated. Adjustable Harmonics Mixing generates a consistent amount of harmonics over a wide dynamic range.



Features

- For Aphex Modular System Model 9000 Series Rack or Compatible dbx 900 Series Rack
- Adjustable Harmonics Mixing
- SPR “Spectral Phase Refractor
- Electronically Servo Balanced Inputs and Outputs
- Aphex VCA 1001 Harmonics Generator
- Operates with I/O Levels from -10dBv to +8dBm
- Operates Balanced or Unbalanced Automatically
- Solo Function for Effects Return Mixing
- All Switch Settings L.E.D. Indicated

Applications

- Recording Studio Tracking and Mixdowns — Adds Air, Sparkle and Presence to Voices and Music, Improves Imaging
- Sound Reinforcement — Adds Clarity and High Frequency Dispersion and Penetration without Increasing Chance of Feedback
- Sampling — Extends Bandwidth and Adds Detail
- Film & Video — Restores Clarity and Intelligibility to Dialogue Tracks, Sound Effects and Music
- AM Broadcasting — Provides the Clarity and Brightness of FM
- FM Broadcasting — Restores Naturalness and Openness Normally Lost Due to Processing

Aphex Aural Exciter Module

Model 9251

The Aural Exciter is a powerful processing tool that has been used and acclaimed by the recording and broadcast industries since 1975, and has found countless new applications since then in sound reinforcement, paging and P.A., tape duplicating, and background music systems. An Aural Exciter can be used to benefit any sound system. Until recently, one had to purchase a complete piece of outboard equipment to enjoy the benefits of the Aural Exciter, but advances in technology made it possible to include the heart of the process on a small module to plug into the Aphex Modular System Rack, Model 9000 (or in the compatible dbx 900 Series rack).

WHY IT'S NEEDED

The audio reproduction process is far from perfect, even under the best of circumstances. Every step causes some degradation of the audio signal including digital to analog conversion. This degradation involves the loss of some of the harmonics or overtones of the sound, the fragile parts that give it intelligibility. Equalizers cannot restore clarity and realism because they can only work on what's left of the original sound, often increasing noise and distortion in the attempt.

Although the initial impression of the Aural Exciter is often that it is some form of EQ, a comparison soon proves the difference. Equalizers are a static, fixed process, and they cannot boost what is no longer there. Equalizers can also add considerable power to the amplifier output, possibly causing amplifier clipping, speaker damage, ear fatigue and/or increased reverberation.

The Aural Exciter is a dynamic process that actually re-creates the missing harmonic material and adds it back in the form of a very small cue signal. Because the enhancement signal is so small, it adds little power to the audio signal. It is easily reproduced, even by low quality systems, and is not affected by acoustic problems, such as "dead zones" or reverberant fields. Because the harmonics or overtones created are derived from the main signal and are musically and dynamically related, the result is very natural and pleasing to the ear.

Aural Exciter is a proprietary process, patented worldwide and cannot be duplicated by any other means than a genuine Aural Exciter. Aural Exciter is a registered trademark of Aphex Systems Ltd.

Specifications

INPUT

Type:	Transformerless, RF-filtered, true-instrumentation, differential servo-balanced
Impedance:	22k Ω balanced, 11k Ω unbalanced
Maximum Input Level:	+27dBm
Nominal Operating Level:	User selectable -10dBv, +4dBm
CMRR:	Greater than 60dB 20Hz to 10kHz

SIDCHAIN

Harmonics Generator:	Aphex VCA1001
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OUTPUT

Type	Transformerless, RF-filtered, differential servo-balanced
Output Impedance	65 Ω
Maximum Output Level :	+25dBm balanced, +21dBu unbalanced
Bandwidth:	\pm 0.5dB from 5Hz to 100kHz
Dynamic Range:	111dB
Unweighted Noise:	-86dBm, 20Hz-20kHz
THD @ +25dBm	0.01%
IMD (SMPTE) @ +25dBm	0.01%

OTHER SPECIFICATIONS

Power Requirements:	\pm 15 Volts DC
Power Consumption (maximum):	76mA
Dimensions:	Board: 4.5" H x 9.5" D; Front Panel: 5.25" H x 1.5" W
Shipping Weight	1 lbs.
Net Weight	<1 lbs.

LINE DRAWINGS AND ARCHITECTURAL SPECIFICATIONS AVAILABLE ON DISK.

APHEX

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Aphex is constantly striving to maintain the highest professional standards. As a result of these efforts, modifications may be made from time to time to existing products without prior notice. Specifications and appearance may differ from those listed or shown.

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