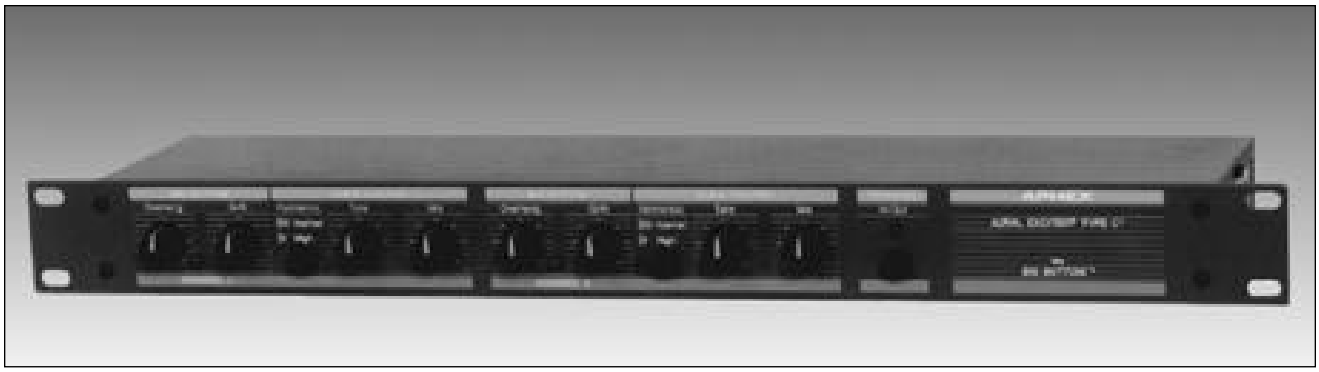
APHEX SYSTEMS

Aural Exciter® Type C² With Big Bottom Model 104



KEY FEATURES

AURAL EXCITER

- Increased Presence & Clarity
- Restores Natural Brightness
- Greater Perceived Loudness
- Improved Detail and Intelligibility

BIG BOTTOM

- Deeper, More Resonant Bass
- Little or No Increase in Peak Output
- Tighter Bass Articulation
- Extend Low Frequencies

Since its introduction in 1975, the patented Aphex Aural Exciter has been used on thousands of hit albums and successful musical tours. The Aural Exciter is a patented audio process that recreates missing harmonics without generating significant changes in the actual signal level.

Reproduced sound is audibly different than the original live sound because of the loss in harmonic detail, often sounding dull and lifeless. The Aural Exciter adds harmonics, restoring the sounds natural brightness, clarity and presence, effectively improving detail and intelligibility. Using the Aural Exciter on specific instruments and/or in the final mix brings life back to the recording.

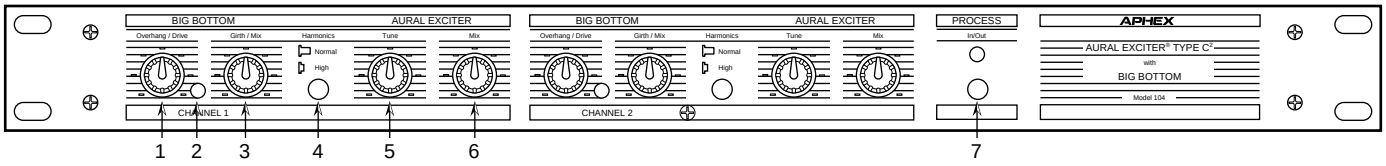
The Aural Exciter extends the high frequencies, unlike EQ's and other brightness enhancers which only boost the high frequencies and alter the overall tonal balance. The stereo image is enhanced with the Aural Exciter, resulting in a greater perceived loudness without an introduction of noise into the audio path due to increased gain. Vocals and instruments seem to stand out, without raising individual volumes in the mix.

Big Bottom circuitry dynamically shapes the bass response in the 20Hz to 120Hz range, increasing the perception of low frequencies without boosting the maximum peak output. The bass frequency response is dynamically optimized to isolate and enhance the lowest bass frequencies to provide a deeper and more resonant bass without overloading the sound system. Using the patented Big Bottom tightens the bass, allowing low frequencies to be more articulated and recognizable.

APPLICATIONS

- Recording
- Post Production
- Sound Reinforcement
- Nightclubs, Discos
- Musicians Rig
- Tape Duplication
- Karaoke

Aural Exciter Type C² With Big Bottom Model 104



FRONT PANEL OPERATION

1, 2 The **Overhang/Drive** control sets the optimum level required for Big Bottom to work effectively, indicated by the green L.E.D. at the right of the control.

3 The **Girth/Mix** control adjusts the amount of enhancement being added to the original signal. The lower the setting, the subtler the effect. The higher the setting, the more dramatic the effect.

4 This switch selects the amount of **Harmonics** being generated by the Aural Exciter circuit, NORMAL and HIGH.

5 The Aural Exciter **Tune** control adjusts the corner frequency of the high pass filter, setting a range of frequencies from 800Hz to 6kHz.

6 The Aural Exciter **Mix** control varies the amount of enhancement mixed back into the original signal, from the sidechain.

7 The **Process In/Out** Switch turns both of the enhanced sidechain signals on and off when the IN position is selected. Selecting OFF, sends only the unmodified signal to the outputs, actively bypassing the 104's circuitry.

GENERAL SPECIFICATIONS

NOMINAL OPERATING LEVEL (user selectable on back)	**+4dBu**	**-10dBV**
INPUT		
Connector:	TRS 1/4" phone jack	same
Type:	Transformerless, differential active balanced	same
Impedance: Balanced:	10KΩ	10KΩ
Unbalanced:	5KΩ	5KΩ
Nominal Level:	+4dBu	-10dBV (-7.8dBu)
Maximum Level:	+20dBu	+8dBV (+10.2dBu)
CMRR:	-40dB	same
OUTPUT		
Connector:	TRS 1/4" phone jack	same
Type:	Single-ended, impedence-balanced* (may be used unbalanced)	same
Impedance: Balanced (SEIB*):	120Ω	120Ω
Unbalanced:	56Ω	56Ω
Nominal Level:	+4dBu	-10dBV (-7.8dBu)
Maximum Level:	+20dBu	+10dBV (+12.2dBu)
AUDIO		
Frequency Response:	± 0.5dB 10Hz - 38KHz	
Dynamic Range:	108dB	
Hum and Noise: (unweighted 10Hz - 22KHz)	- 85dBu	
Crosstalk (10Hz - 22khz @ max output)	- 70dB	
THD (10Hz - 22khz @ max output)	.003%	
IMD (10Hz - 22khz @ max output)	.004%	
SYSTEM FUNCTIONS	**(See Above)**	
OTHER SPECIFICATIONS		
Power requirements:	Unit is powered by an external 24-volt, 300mA transformer (supplied with unit). Primary voltage, connectorization and agency listings of transformers supplied with units are appropriate for local power at points of destination.	
Power Consumption (maximum):	6 watts	
Dimensions:	19" W x 1/75" H x 5.75" overall depth, depth behind front panel: 4.5"	
Net Weight:	Rack-mounted preamplifier, 3.5lbs.; wall transformer, 8.8 oz. (USA model)	
Shipping Weight:	5.lbs.	

APHEX SYSTEMS 11068 Randall Street • Sun Valley, CA 91352 • (818) 767-2929 • Fax (818) 767-2641

Aphex is proudly American...100% owned, engineered and manufactured in the U.S.A. Aphex is a registered trademark of Aphex Systems Ltd.

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.