

Dynamic System Controller™

Series A

SPECIFICATIONS

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Frequency Response (Sense Inactive):
38 Hz-20 kHz

Frequency Response (Maximum Sense):
58 Hz-20 kHz

Subsonic Filter (Sense Inactive):
30 dB/octave $f_3=38$ Hz

Subsonic Filter Slope (Maximum Sense):
30 dB/octave $f_3=58$ Hz

Input Impedance (each channel):
47 K ohms

Sense Input Impedance (each channel):
True differential - 47 K ohms

Maximum Input Level:

@ 40 Hz: 3 Vpp
@ 2 kHz: 21 Vpp

***Note:** Maximum input levels are a function of sense input levels. At low sense levels, values are as indicated. As sense levels increase, 40 Hz values rise to their ultimate value of 21 Vpp.

Maximum Output Level:

@ 40 Hz: 20 Vpp
@ 2 kHz: 25 Vpp

Total Harmonic Distortion:

Less than .01%, 38 Hz to 20 kHz (sense inactivated)

Hum and Noise:

Better than -86 dBV (sense inactivated, 600 ohms input termination)

Crossover Frequency (Biamp Mode):

1200 Hz

Crossover Type:

3rd order (18 dB/octave) Butterworth

Indicators:

Low frequency contour each channel

Excursion process - each channel (subsonic control)

Power Requirements:
120 VAC, 60 Hz, 15 watts

Physical Dimensions:
19" W x 1 1/4" H x 9 7/8" D
(48.2 cm x 4.44 cm x 25.1 cm)

Weight:
9 lbs. (4.1 kg)

FEATURES:

- Full-Range/Biamp operation
- Two-channel stereo operation
- 40 Hz/60 Hz tuning
- Electronically balanced inputs
- Automatic Loudness Compensation
- Process indication LED's

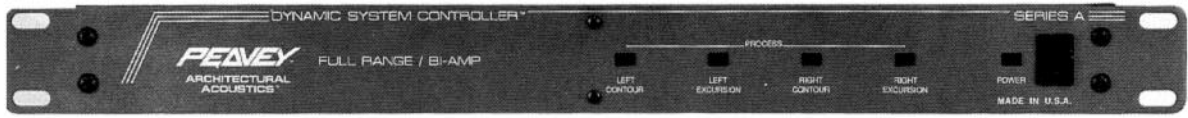
DESCRIPTION

Dynamic system controllers are a critical link in the signal processing chain. Their use in permanent installation systems is indicated when a wide variety of program material and large dynamic range requirements are specified. The Peavey Architectural Acoustics™ Division Dynamic System Controller™ Series A is a two-channel processor that functions as either a full-range or biampable processor, with automatic low frequency loudness compensation and subsonic control. In full-range mode, the system may be used with any public address/sound reinforcement loudspeaker system that has a vented low frequency section

tuned to either 60 or 40 Hz. In biamp mode, the third order Butterworth crossover is set to 1200 Hz and requires a loudspeaker with components that are compatible with that crossover frequency. The basic processor function is to control low frequency response as a function of power amplifier output levels. At low power levels, the processor extends system bandwidth and provides loudness compensation. As amplifier levels increase, the Dynamic System Controller Series A reduces loudness compensation equalization and begins to limit system bandwidth. The effect is to provide extended bandwidth and fidelity at low levels and to reduce power-induced distortion and maintain subharmonic control at elevated levels.

CONNECTION

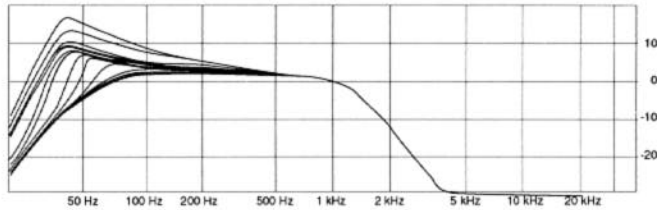
Connection of the Dynamic System Controller Series A is a straightforward matter. Using direct coupled amplifiers, connection is achieved by sending a parallel amplifier output signal into the sense input of the processor. That is to say the sense input of the processor is connected across the output of a power amp. In a situation where transformer coupled outputs are being used, such as in a 70.7 volt line, connection of the processor needs to be on either the 4



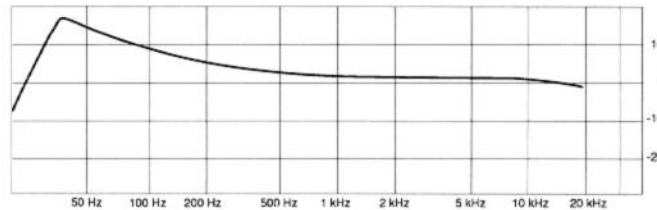
or 8 ohm tap, depending upon the impedance of the speakers being used. Even if the 70.7 volt tap is being used, the appropriate sense levels will be found not on the 70.7 volt tap but on the 4 or 8 ohm tap.

ARCHITECTURAL SPECIFICATIONS

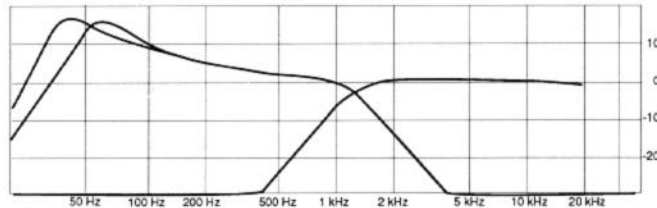
The Dynamic System Controller™ Series A or processor shall be a two-channel, single-space, 19" rack-mount chassis. The system shall function in either full-range or biamp mode. The crossover frequency in biamp mode shall be 1200 Hz. The filter type shall be a third order (18 dB per octave) Butterworth. Each channel shall have electronically balanced inputs and low impedance non-balanced outputs. The system shall provide bandwidth extension for vented loudspeaker systems with an enclosure resonant frequency of 40 Hz or 60 Hz. Each channel shall be equipped with an electronic sense input capable of monitoring amplifier output levels. The Dynamic System Controller Series A shall automatically adjust its low frequency equalization and F3 point based on amplifier output level sensing. The Dynamic System Controller shall be a Peavey Architectural Acoustics™ Division model Dynamic System Controller™ Series A or functional equivalent.



Low frequency response as a function of sense input level



Frequency response full range mode



Biamp mode frequency response (40 Hz and 60 Hz modes illustrated)

Peavey Architectural Acoustics Products Are Engineered and Manufactured in Our Facilities in the U.S.A.



Features and specifications subject to change without notice.

A Division of Peavey Electronics Corporation

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