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# AMP3300R

**LEF** Single Ended  
Class A Power Amplifier

**High End control / power amp in pure class A single ended technology**

**No feedback due to CEC's LEF circuit IGM volume control**



[Specifications](#)

## Pure class A single-ended amplifier

The AMP3300R is a class A amplifier that features an extremely pure single-ended circuit with one voltage amplifier stage and one current amplifier stage that handle all music signal processing. The AMP3300R overcame the inefficient and extremely low output, which earlier class A amplifiers had, by combining the high-quality class A amplification with the Load Effect Free (LEF) circuit that avoids various sources of nonlinearities.

## CEC's original LEF circuit

The AMP3300R features CEC's unique Load Effect Free (LEF) circuit to completely avoid all factors that result in deterioration of sound quality. The LEF circuit makes possible pleasing and detailed playback as well as high efficiency. Every amplifier should be a perfect voltage source in theory, while the current into the speaker is likely out of phase in relation to the voltage. The phase relation varies with the frequency, and it is even dynamically moving. NFB amplifiers are sensitive to this matter, specifically to the dynamic changes. The LEF's current control stage is not linked to the signal voltage, and just checks the current requirement that depends on the speaker load without "knowing" about the phase relation to the voltage. This "phase independent operation" is an important reason for the obvious drive ability as well as sound quality. The AMP3300R also has an automatic bias adjust function for stable signal processing.

## Fully balanced signal processing circuit

The AMP3300R adopts a full-balanced circuit design to achieve extremely high-speed and low-distortion signal transmission. Unbalanced input is converted to a balanced signal in the very first stage of the amplifier with no deterioration of sound quality, resulting in a fully balanced output signal. In addition, the left and right signals are processed in circuits divided to two different layers to ensure channel separation and a high-level stereo image.

## IGM volume control

The Intelligent Gain Management (IGM) system is applied to minimize signal loss during volume adjustment. Sound level is adjusted by controlling the amplifier gain itself with a knob on the front panel. The input signal is not degraded by any mechanical volume resistor or CMOS device. As a result of this,

lowest noise, low distortion and highest dynamic performance has been achieved .

#### Protection function

When continuous clipping is detected, the volume level is reduced automatically. In case of overheating, the unit is completely shut down. After cooling down, it turns on automatically.

### AMP3300 Specifications

Rate output	64W+64W(8Ω)
Frequency response	0.5Hz-200kHz/±1dB
S/N ratio	102dB
THD	0.015%/50mW
Gain	XLR : 22dB(max volume) RCA : 28dB(max volume)
Input terminals	balanced XLR x 1 unbalanced RCA x 4
Output terminals	TAPE rec.(RCA) x 1 Speaker x 1
Power supply	AC 120/230VAC 60/50Hz (specified on the rear panel)
Power consumption	Min.32W Max.300W
Dimensions	approx.435(W) x 350(D) x 102(H)mm (include heatsink,leg & knob)
Weight	approx.9.2kg
Accessories	Remote controller, AC power cord, owner`s manual
Color	Black or Silver

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