



C 316BEE STEREO INTEGRATED AMPLIFIER

FDP
Full Dynamic Power

PS

<0.5W
STANDBY



The Current Budget Amplifier Champ now Adds Phono Input

Improving the Budget Reference Amplifier

NAD has a distinct reputation for creating some of the best performing budget amplifiers of all time. The lineage is impressive, all the way from the 3020 of 1978 to the current C 328, with many “Best Amp” awards and five-star reviews along the way. The C 316BEE lived up to expectations, garnering multiple accolades including an EISA award for ‘Best Product 2008-2009’ and top recommendations from the world’s leading audio publications. With the resurgence of vinyl we decided to update the design by including NAD’s highly acclaimed RIAA phono stage. This sophisticated circuit combines low noise with high overload margins to eliminate noise and distortion. RIAA equalization is extremely accurate (a rarity at this price) and there is even an infrasonic filter to reject airborne vibrations that can cause parasitic feedback.

Proven Technology Enhanced by Innovation

NAD’s PowerDrive Circuit has been proven to offer a remarkable combination of high current drive needed for complex loudspeaker loads, and high levels of undistorted dynamic power. By monitoring the precise operating condition of the power amplifier, PowerDrive uses this intelligence to automatically optimize the power supply settings for uniformly low distortion and maximum power in the real world of music listening. As featured in our top Masters Series models, PowerDrive uses a complex ‘analogue computer’ to determine the optimal settings. For the C 316BEE, NAD utilized PowerDrive S, a clever computation circuit requiring fewer parts at a much lower cost without any reduction in effectiveness. For short term peaks of 5 milliseconds, the C 316BEE’s undistorted peak power is >110W into 8 Ohms, 190W into 4 Ohms and 270W into 2 Ohms.

FEATURES & DETAILS

Continuous Power

- 2 X 40 Watts into 4 or 8 Ohms, 20Hz – 20kHz at 0.03%THD

Dynamic Power (20ms)

- 90W into 8 Ohms, 120W into 4 Ohms, 170W into 2 Ohms

- PowerDrive S
- 5 Line Level Inputs
- MM Phono Input for Vinyl
- Front Panel Input for Portable Media Player
- Bass and Treble Controls
- Tone Defeat (Bypass)
- Headphone Output
- IR Remote Control
- Multi-way Speaker Binding Posts
- Gold Plated RCA Jacks
- Toroidal Power Transformer
- <0.5W Standby consumption



All the hallmarks of NAD technology are present, from the generously sized toroidal power transformer and low ESR smoothing capacitors, to the multiple regulated secondary supplies, to the heavy duty discrete output transistors, the C 316BEE is every bit as refined and sophisticated as other NAD amplifiers.

Simplicity

While the C 316BEE has everything necessary for musical enjoyment, it is refreshingly limited to the essentials: six inputs, one set of speakers, a headphone jack, and full function remote control. It has a compact size and a handsome yet understated exterior. It is essential NAD.

Value

We are confident that the C 316BEE will set new benchmarks for performance, both measured and audible, at this affordable price point. Unless you have power hungry speakers, listen at dangerously loud levels, or have a very large room, the C 316BEE will be the amplifier for you. Fundamental specifications for noise, distortion, power, stereo separation, and volume control tracking, are all class leading and would be impressive on an amplifier costing many times its modest price.

While its bells and whistles may not be as extensive as our more expensive offerings, the C 316BEE is far from a “stripped down” product. With six line level inputs, including an MM Phono Input, full IR remote control, defeatable tone controls and a front panel media player input for a phone or tablet, the C 316BEE is fully equipped to be the control center for a high performance music system.

The sonic result of this high technology is a relaxed and inviting sound that digs out the subtle details in your favourite recordings and presents them across a panoramic stereo sound stage. The impressive dynamic power reserves make the C 316BEE sound both articulate and alive. The silent background and low distortion gives a sense of solidity and presence to your music and brings out the best your loudspeakers have to offer.

Specifications C 316BEE

All specs are measured according to IHF 202 CEA 490-AR-2008 standard. THD is measured using AP AUX 0025 passive filter and AES 17 active filter.

LINE IN/HEADPHONE OUT

THD (20 Hz – 20 kHz)	<0.03 % in 300 ohms at 2 V out
Signal-to-Noise Ratio	>100 dB (A-weighted, 32 ohms, ref. 2V out, unity gain)
Frequency response	±0.3 dB (20 Hz - 20 kHz)
Output impedance	68 ohms

LINE IN/SPEAKER OUT

Continuous output power into 8 ohms and 4 ohms	40W (ref. 20 Hz-20 kHz at rated THD, both channels driven)
THD (20 Hz – 20 kHz)	<0.03 % (250 mW to 40 W, 8 ohms and 4 ohms)
Signal-to-Noise Ratio	>95 dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >97 dB (A-weighted, 500 mV input, unity gain in 32 ohms)
Clipping power (at 1 kHz 0.1 % THD)	>45 W in 8 ohms >60 W in 4 ohms
IHF dynamic power	8 ohms: 90 W 4 ohms: 120 W 2 ohms: 170 W
Damping factor	>200 (ref. 8 ohms, 1 kHz)
Frequency response	±0.3 dB (20 Hz - 20 kHz, Tone Defeat ON) Treble: ± 5dB at 10 kHz Bass: ± 8 dB at 100 Hz
Channel separation	>70 dB (1 kHz)
Maximum input level	4.3V (1 kHz THD 0.1%)
Input sensitivity (for 40 W in 8 ohms)	200 mV
Standby power	<0.5 W

PHONO IN/SPEAKER OUT

THD (20 Hz – 20 kHz)	<0.03 % (1 W to 40 W, 8 ohms and 4 ohms)
Signal-to-Noise Ratio	>75 dB with IHF MM cartridge (A-weighted, ref. 5mV input 1 kHz and 1W output in 8 ohms)
Frequency response (RIAA deviation)	±0.3 dB (20 Hz - 20 kHz, Tone Defeat ON)

Note: The RIAA response is consistent with a pre-emphasis that is rolled off at 50kHz by a second order filter, such as used in Neumann cutting lathes.

Maximum input level	71 mV (1 kHz THD 0.1%)
Input sensitivity (for 40 W in 8 ohms)	2.95 mV

DIMENSION AND WEIGHT

Gross dimensions (W x H x D)	435 x 90 x 285 mm 17 1/8 x 3 9/16 x 11 1/4 inches
Net weight	5.5 kg (12.1 lbs)
Shipping weight	6.4 kg (14.1 lbs)

* Gross dimension includes feet, volume knob and extended rear panel terminals. ** Non-metric measurements are approximate. NAD Electronics will not assume any liability for errors being made by retailers, custom installers, cabinet makers, or other end users based on information contained in this document. Note: Installers should allow a minimum clearance of 55mm for wire/cable management.



NAD Electronics International reserves the right to change specifications or features without notice. NAD is a registered trademark of NAD Electronics International. All rights reserved. No part of this publication may be reproduced, stored, or transmitted in any form whatsoever without the written permission of NAD Electronics International. © 09/17 17-078 NAD Electronics International. www.NADelectronics.com