C 275BEE Stereo Power Amplifier

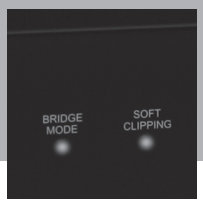
> POSITIONING

The C 275BEE is the perfect complement to NAD's C 165BEE Preamplifier making a reference level of performance available for far less money than previously possible. Attention to the most minute detail is evident everywhere, from the heavy gauge steel chassis to the sophisticated power supplies and copper buss bars channeling almost absurd amounts of current to the custom gold plated speaker binding posts.

The C 275BEE boasts many upgrades and refinements taken directly from the highly acclaimed NAD Masters Series M3 Amplifier. These include application of Bjorn Erik Edvardsen's innovative and patented Distortion Canceling Circuit in the output stage and BEE Clamp in the power supply. An improved tone control circuit and revised PCB layout has reduced distortion and noise to unprecedented levels. Taken together, these improvements mark a sharp upturn in performance that simply must be heard, to be fully appreciated!

> FEATURES

- 150W x 2 Continuous Power into 4 Ohms and 8 ohms
- 250W, 410W, 600W IHF Dynamic power into 8, 4 and 2 ohms, respectively
- PowerDrive™ circuit
- Holmgren Toroidal Power transformer
- All discrete circuitry
- Class A Voltage Stages
- Distortion Canceling Circuit
- BEE Anti-saturation Clamp
- Short signal path from input to output
- All sockets Gold plated
- Soft Clipping™
- ATOLogic 12 volt trigger/ signal sensing input
- Detachable IEC Power Cable
- <1W Standby Power Consumption
- Free of lead and other environmentally dangerous substances



> DETAILS

Features

While 150W is very powerful for home use, there can never be too much power if you like your music loud and clear. An option to add more power in the future is to 'bridge' the C 275BEE and add a matching C 275BEE for one of the most powerful home audio systems you'll ever encounter. Power goes from 150W x 2 to over 400W x 2! This also has the additional benefit of being 'dual mono', meaning each channel and each speaker is totally isolated from the effect of the other.

The C 275BEE is equipped with NAD's ATOLogic circuit which includes both a 12V-trigger system and signal-sensing turn ON option. This extra level of flexibility makes it easy to integrate the C 275BEE into automated control systems or simply enjoy the extra convenience of auto turn ON. Consumption is a very low <1W when in Standby mode.

Design: PowerDrive

The C 275BEE also benefits from NAD's proprietary PowerDrive circuit topology, now well established and used throughout the NAD product range. The PowerDrive topology allows the C 275BEE to deliver maximum performance under virtually any circumstance, independent of the loudspeakers it is driving. The circuitry automatically senses the impedance characteristics of the loudspeaker and will then adjust its power supply settings to best cope with that specific load. PowerDrive™ topology is a practical approach to enable an amplifier to easily deal with musical dynamics and difficult speaker loads. Thus we have the highly desirable characteristics of high dynamic power and low impedance drive capability in one affordable package.

Getting high dynamic power from the power supply to your loudspeaker requires a fast wideband amplifier stage rugged enough to pass and control high peak currents without premature protection intervening. The safe operating limit for the C 275BEE has 4 times the capacity of the typical amplifier in this price range by using 4 pairs of 220W output transistors per channel.

The C 275BEE has the lowest levels of distortion and noise available in its price class and is easily capable of embarrassing far more expensive products. To prove it NAD uses Full Disclosure Power, the most demanding criteria for performance measurement. FDP specifies distortion under the most extreme conditions of low impedance loads and frequency extremes rather than the simple and easy 1kHz @ 8 Ohms test quoted by many of our competitors. We use this stricter performance criterion because it more closely matches the demands of real music and real loudspeakers. Maintaining specified distortion at 4 Ohms and at 20Hz and 20kHz is several orders of magnitude more difficult to achieve than the simple 8 Ohms and 1kHz test.

NAD also takes a stand against the meaningless "brochure power" touted by many of our competitors by offering Full Disclosure power specs. We specify minimum continuous power, across the entire audible range of frequencies, at rated distortion, for both 8 and 4 Ohms with all channels driven simultaneously. Perhaps even more importantly, we also specify Dynamic Power at 8, 4, and even 2 Ohms, which better describes the way the amplifier will perform in the real world, with musical signals and reactive loudspeaker loads.

Less Distortion = More Music

Noise and distortion mask the fine details of a musical recording robbing musical texture and dimension and replacing them with non-musical artifacts. NAD has spent the last 35 years perfecting our designs to have the lowest distortion and highest power in its price class. This cannot be overstated! Our competitors often rate distortion at only 80% of rated power, and even then can't match our very conservative spec of 0.008% at any frequency within the range of human hearing. Our noise spec is often 10dB (100 times!) less than that of competing amplifiers. This is far from a trivial difference as fine detail and nuance (micro dynamics) are often obscured by noise in lesser amplifiers, robbing a performance of that illusive sense of 'realism'. It is that exciting feeling of being there at the live performance.

But even the most carefully reported specs cannot fully describe the sonic performance of an amplifier. Only your own ears can finally judge our achievement. We urge you to listen and compare NAD to other products in its price range, and even higher. We don't think you'll find anything that comes close to offering the C 275BEE's overall musical satisfaction, well-rounded performance, and stellar value for money.

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> SPECIFICATIONS

Overall Specifications

Fixed IN, Speaker OUT

Continuous output power into 8 Ω and 4 Ω (both channels driven)		>150 W (ref. rated THD, 20 Hz – 20 kHz)
Continuous output power into 8 Ω (Mono, Bridge mode)		>330 W (ref. 20 Hz - 20 kHz, <0.02% THD)
Rated THD (250 mW to rated power, CCIF IMD, DIM 100)		<0.008 % (ref. 20 Hz - 20 kHz)
Clipping power (4 Ω and 8 Ω)		>170 W (ref. 1 kHz 1% THD)
IHF dynamic power	8 Ω	250 W
	4 Ω	410 W
	2 Ω	600 W
IHF dynamic power (Bridge mode)	8 Ω	800 W
	4 Ω	1200 W
Peak output current		>50 A (ref. 1 Ω, 1 ms)
Signal/Noise ratio		>102 dB (A-weighted, ref. 1 W) >123 dB (A-weighted, ref. 150 W)
Damping factor		>180 (ref. 8 Ω, 50 Hz and 1 kHz)
Frequency response		± 0.1 dB (ref. 20 Hz - 20 kHz) 3 Hz - 100 kHz (ref. -3 dB)
Input impedance (Fixed IN)		10 kΩ + 200 pF
Input impedance (Variable IN)		100 kΩ + 100 pF
Input Sensitivity		1-2v (ref. rated power)
Voltage gain		29 dB
Minimum input level for AUTO TRIGGER		10 mV at 1 kHz
Time to power OFF at no signal in AUTO mode		<10 minutes

Power Consumption

Normal operation	312 W (ref. 230V AC 50 Hz; 120V AC 60 Hz)
Standby power	<1 W
Idle power	<100 W

Dimension and Weight

Dimensions (W x H x D)		
	Net	435 x 133 x 352 mm 17 1/8" x 5 1/4" x 13 3/4"
	Gross	435 x 150 x 378 mm 17 1/8" x 6" x 15"
	Net weight	32.2 lbs (14.6 kg)
	Shipping weight	37.3 lbs (16.9 kg)

* Gross Dimensions include volume knob / speaker terminals / connectors / feet.
Note: Installers should allow a minimum clearance of 2 - 4 inches for wire management.

> REAR LINE DRAWING