

# C 268 STEREO POWER AMPLIFIER

Hybrid Digital STANDBY FDP 272



## Powerful. Innovative. Efficient.

#### Introducing the NAD C 268.

#### **Expansive Power**

The C 268 is an amazingly affordable amplifier with features and technology unmatched by other amplifiers in its class. This advanced amplifier includes many cutting edge technological breakthroughs developed by NAD over a 40-year history of creating affordable ultra-high performance audio components.

### **Amazing Flexibility**

The C 268 may be a basic Power Amp, but we have carefully thought through all the use cases typically encountered to create a rich feature content. Selectable balanced inputs make the C 268 a natural for connection to high end Preamps and Processors. These inputs include a trim control useful for matching to other components or for use in bi-amping Speakers. A line out allows further addition of power on the same channel for additional speakers or subwoofers. Alternatively the C 268 can be paired with our NAD C 368 Integrated DAC Amp, and with both units bridged for Mono, 300 distortion-free watts per channel are available for your listening pleasure! Auto-sense with selectable threshold is perfect for automating complex systems or hiding the amp out of sight in a cabinet. We even include a Ground Lug that can be very useful for eliminating ground loops and noise in complex multi-unit systems. Added to all this connectivity is a Bridge Switch that turns the C 268 into an amazingly powerful Monobloc Amplifier. Start with one and add a second C 268 later when you upgrade your speakers.

#### **FEATURES & DETAILS**

- 80W x 2 Continuous Power into 8 or 4 Ohms
- Stereo Dynamic Power 120/200/250 @ 8/4/2 Ohms
- 300W x 1 Continuous Power into 8 Ohms Bridge Mode
- Mono Dynamic Power 500/540W @ 8/4 Ohms
- Balanced Line Inputs
- Single-Ended Line Inputs
- Variable Input Level Control
- Line Output for Daisy Chaining
- 12V Trigger In/Out
- Auto Turn-on with Selectable Threshold
- Ground Lug
- Detachable AC Power Cord



### **Getting the Basics Right**

It is surprising how many seemingly advanced products in the market today often miss many of the most basic requirements for satisfying performance. Low noise circuits, accurate channel balance, proper input and output impedance characteristics, high overload margins and stability with difficult speaker loads. NAD starts by getting these things precisely right and advances from there. Our line inputs, both Balanced and Single-ended, can accommodate all kinds of analogue source components by offering ideal input impedance characteristics with linear ultralow-noise buffer amplifiers to prevent any sonic degradation caused by inappropriate loading of the source device. These are all details you can hear.

### Sophisticated Power

NAD has moved away from the old fashioned and power hungry linear power supplies and Class AB output stages that waste nearly half of the energy consumed producing heat rather than sound. Instead we have developed even better performing circuits based on switch mode power supplies and Class D output stages. Once thought to be inferior to traditional topologies, NAD's advanced work in this area has created some of the best performing amplifiers regardless of basic design principle. These new designs are very linear over a wide bandwidth, providing dramatic advances over previous models with consistent performance into all speaker loads.

The power supply is capable of nearly 200 watts continuously and over 500 watts instantaneously to allow for short term musical transients. Innovative Asymmetrical PowerDrive fully utilizes every last watt available with its vast reserves of dynamic power available to accurately reproduce musical transients without distortion or compression. It can operate with any AC mains voltage from 100V to 240V and provides pure DC power to all the various stages of the C 268. This highly efficient supply also provides near perfect regulation of voltage across a wide range of conditions and provides a solid noise-free foundation for the amplifying stages.

The C 268 uses a customised version of the proven Hypex UcD output stage. This allows for massive power with nearly unmeasurable distortion and noise in the audible range. Every detail of this design has been carefully crafted and perfectly executed to wring out every last drop of performance.

#### Specifications C 268

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.

#### **ANALOG AUDIO INPUT/LINE OUT**

THD (20 Hz – 20 kHz) <0.003 % at 2V out

Signal-to-Noise Ratio >110 dB (IHF; 20 Hz - 20 kHz, ref. 2V out)

Channel separation >90 dB (1 kHz)

>75 dB (10 kHz)

Input impedance (R and C) Single-ended: 33 kOhms + 220 pF

Balanced: 10 kOhms +20 pF

Maximum input signal >7.0 Vrms (ref. 0.1 % THD)

Output impedance 440 hms

Frequency response ±0.1 dB (20 Hz - 20 kHz)

Maximum voltage output -IHF load >7.0 V (ref. 0.1 % THD)

#### **ANALOG AUDIO INPUT/SPEAKER OUT**

Continuous output power into 8 Ohms and 4 ohms(Stereo mode) 80 W (ref. 20 Hz-20 kHz at rated THD, both channels driven)

Continuous output power into 8 Ohms (Bridge mode) 300 W (ref. 20 Hz - 20 kHz at THD 0.03%) THD (20 Hz - 20 kHz) <0.03 % (250 mW to 80 W, 8 Ohms and 4 Ohms)

Signal-to-Noise Ratio >98 dB (A-weighted, 500 mV input, ref. 1 W out in 8 0hms)

Clipping power (Stereo mode, at 1 kHz 0.1 % THD)  $$>95\ W$$  Clipping power (Bridge mode, at 1 kHz 0.1 % THD)  $$>315\ W$$  IHF dynamic power (Stereo mode, at 1 kHz 1 % THD)  $$8\ Ohms: 120\ W$$ 

4 Ohms: 200 W 2 Ohms: 250 W

IHF dynamic power (Bridge mode, at 1 kHz 1 % THD)

8 Ohms: 500 W 4 Ohms: 560 W

Peak output current >20 A (in 1 ohm, 1 ms)

Damping factor >100 (ref. 8 ohms 20 Hz - 20 kHz)

Frequency response ±0.3 dB (20 Hz - 20 kHz)
Channel separation >80 dB (1 kHz)

>80 dB (1 kHz) >70 dB (10 kHz)

Input sensitivity (for 80 W in 8 Ohms) Fixed Gain mode: 920 mV

Bridge Mode Gain

Line In – Balanced and Single-ended Fixed Gain mode: 25 dB

Variable Gain mode: 14.5 dB - 34.5 dB

**Bridge Mode Sensitivity** 

Line In – Balanced and Single-ended Fixed Gain mode: 2.8 V for 300 W in 8 Ohms

Variable Gain mode at maximum: 940 mV for 300 W in 8 Ohms

Bridge Mode Gain, C 268 and C 368 (RHC Pre Out C 368 driving LHC Line Input C 268)

Fixed Gain mode: 43 dB at maximum volume C 368

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Bridge Mode Sensitivity (same configuration as above) 350 mV for 300 W

Standby power <0.5 W

#### **DIMENSION AND WEIGHT**

Gross dimensions (W x H x D) 435 x 100 x 390 mm (17 1/8 x 3 15/16 x 15 3/8 inches)

 Net weight
 7.3 kg (16.1 lbs)

 Shipping weight
 8.7 kg (19.2 lbs)

<sup>\*</sup> Gross dimensions include feet, extended buttons and 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.

