C 272 Stereo Power Amplifier

- 2 x 150W Minimum Continuous Power into 4/8 ohms
- 220W, 340W, 460W IHF Dynamic Power into 8, 4 and 2 ohms, respectively
- PowerDrive™
- High Current Holmgren™ Toroidal Power Transformer
- Bridgeable to 400W mono (8 ohms)
- Both fixed and variable inputs, switch selectable
- Double set of loudspeaker binding posts to facilitate bi-wiring
- All Discrete Circuitry
- Gold plated RCA Connectors
- NAD Soft Clipping™
- 12V Trigger Input for remote Stand-by/On switching
- IEC Detachable Power Cable
- ATO Logic

The all-new NAD C 272 is part of a new range of amplifiers, which will further enhance NAD's enviable reputation for state of the art products at sensible prices. The key design goals of the new range are PERFORMANCE and RELIABILITY. Both are attained at a very competitive price through efficient innovative design, simple circuitry and meticulous engineering.

"Building Block Concept"
For maximum flexibility, the C 272 can operate in bridged mono mode, nearly tripling its single channel stereo mode continuous power rating into 8 ohms.This makes it an ideal choice for a subwoofer amplifier or part of a high powered home theatre or stereo system.

Additional Features
The C 272 also incorporates NAD's acclaimed switchable "Soft Clipping" circuit that significantly reduces the risk of damage to loudspeakers due to prolonged high power operation. The technological effort behind the C 272 results in a relaxed unstrained musicality, with transparent high frequencies, a deep solid bass foundation and a smooth well-integrated midrange.

The output relay protection circuit provides silent switch on and off, together with non-evasive protection against error conditions such as short circuits and overheating. Using the 12V trigger input, the C 272 is easily switched On or to Stand-by from remote components featuring 12V trigger outputs. NAD's own C 162 preamp sport 12V trigger outputs, for instance. The inclusion of 12V triggers make the C 272 an ideal choice for demanding, high quality Custom Install applications. Equipped with two sets of loudspeaker binding posts, adding a second pair of speakers becomes easy. The second set of binding posts will also facilitate "bi-wiring" speakers, a practice popular with demanding audiophiles.

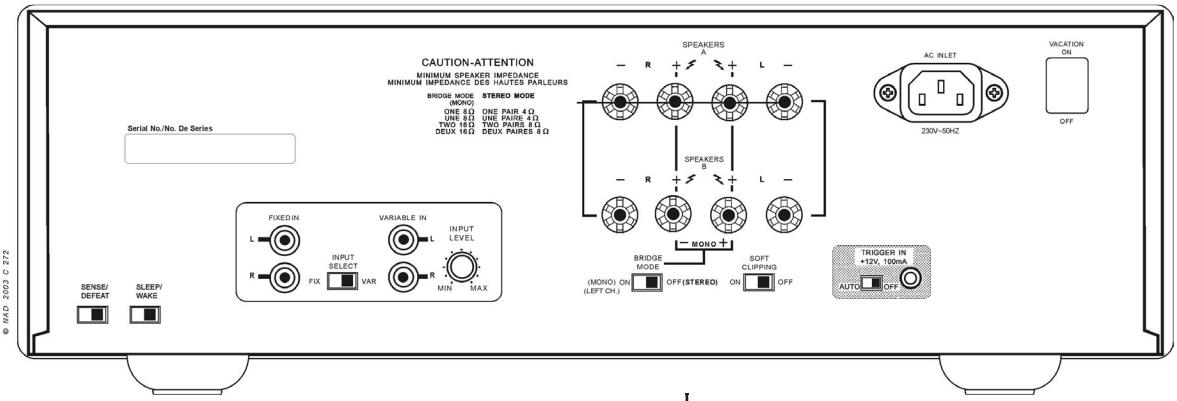
PowerDrive™
The C 272 also benefits from NAD's proprietary PowerDrive amplification circuitry, now well established and used in many NAD models including the highly reviewed C 320BEE and C 350. PowerDrive allows the C 272 to deliver maximum performance under virtually any circumstance, independent of the loudspeakers it is driving. The circuitry automatically senses the impedance of the loudspeaker and then adjusts its power supply settings to best cope with that specific load.

With PowerDrive, the relationship of voltage to current is kept at an ideal proportion, eliminating the current limiting distortion common in lesser designs. This also gives it an unusual characteristic compared to traditional amplifiers when measuring its continuous output power; the RMS output power remains the same at 120 watts with either an eight or a four-ohm load. This is not unusual for NAD however. NAD takes a stance against the mindless "brochure power" approach which doesn't give a realistic indication of an amplifier's true capabilities. Instead, PowerDrive is a practical approach to enable an amplifier to easily deal with musical dynamics and difficult speaker loads. More meaningful in the real world are the C 272's dynamic capabilities; up to 450 watts into 2 ohms and up to 70 amps current capability into 1 ohm!

Design Features

The input and driver stages of the C 272 are fed from a separate low-noise, high voltage discrete component regulated power supply, which effectively isolates them from the high current output stage of the amplifier ensuring the lowest possible levels of noise and distortion. Careful design incorporating sensible grounding results in an amplifier with an exceptionally clean, noise free output signal.

Other design features include the generous power supply with a large toroidal transformer (less mechanical hum and stray magnetic field) and over-specified robust output devices further lead to low noise and low distortion. The C 272 exhibits extraordinarily low levels of distortion at all power levels and under almost any operating condition. Unlike most amplifiers, distortion does not increase at the frequency extremes or even when presented with low impedance loads. What little distortion there is remains the same at 8 ohms or 4 ohms!



Power Amp Section	
Power output Stereo Mode (8Ω within rated distortion)	2 x 150W (21.76dBW)
Rated distortion (THD 20Hz-20kHz)	0.02%
Clipping power	180W (22.55dBW)
IHF dynamic headroom at 8Ω	3dB
IHF dynamic power at 8Ω	220W (23.42dBW)
IHF dynamic power at 4Ω	340W (25.31dBW)
IHF dynamic power at 2Ω	460W (26.62dBW)
Damping factor (ref. 8Ω, 50Hz)	>150
Input impedance	20kΩ/470pF
Input sensitivity (for rated power into 8Ω)	1.3V
Voltage gain	29dB
Frequency response; 20Hz-20kHz	± 0.3dB
Signal/noise ratio; ref 1W	>100dB
Signal/noise ratio; ref rated power	>120dB
Bridged Mode	
Continuous average power output into 8Ω	300W (24.8dBW)
IHF dynamic headroom at 8Ω	2.2dB
IHF dynamic power at 8Ω	780W (27dBW)
IHF dynamic power at 4Ω	1132W (28.5dBW)
Physical Specifications	
Dimensions (W x H x D)	17 1/8 x 5 3/16 x 13 13/16" (435 x 132 x 350mm)
Net weight	24.8 lbs (11.2kg)
Shipping weight	31.3 lbs (14.2kg)