



# C 338 Hybrid Digital Integrated Amplifier



## NAD's New Classic Amplifier. *Intelligent. Powerful. Efficient.*

### Introducing the NAD C 338.

#### Expansive Power with Unprecedented Flexibility.

The C 338 adds big sound to your favourite music sources and brings incredible flexibility to any stereo system. With Spotify Connect®, Bluetooth®, and the first-ever hi-fi amplifier to have Chromecast built-in®, the C 338 allows you to stream and cast music directly from a mobile device or any music streaming app, letting you enjoy your music wirelessly. Add a turntable using the phono input and experience the warmth of vinyl collections with the room-filling sound of NAD's HybridDigital™ amp technology. Power, volume, source selection, and device settings are all controlled using the intuitive interface of the NAD Remote App for iOS and Android.

#### Getting the Basics Right

Built with NAD's renowned music-first approach to audio architecture and amp design, the C 338 is equipped with the most advanced components commonly found in NAD's class-leading line of amplifiers. Always starting with the details you can hear and advancing from there, NAD develops low-noise circuitry with the precision and stability to deliver incredible, near-zero distortion sound for the most difficult speakers.

#### HybridDigital™ Amp Technology

The search for a high-performance Class D solution led NAD to HybridDigital™, an innovative amplifier technology that uses a variable modulation frequency to bring out the life-like qualities of music, while reducing distortion under every operating condition. This highly optimized design gives phenomenal performance to the C 338 amplifier, both measured and subjective.

#### FEATURES & DETAILS

- 50W x 2 Continuous Power into 8 or 4 Ohms
- Wi-Fi enabled with network streaming of music services, internet radio, and UPnP
- Bluetooth® ADP4
- MM Phono input
- TV audio input
- SPDIF coax and optical inputs
- Subwoofer out
- Headphone amplifier
- Bass EQ
- IR Remote
- Mobile Control App for smartphone and tablet



## Efficient Class D Power

NAD has worked tirelessly to create the best performing Class D amplifiers that are energy efficient and produce beautiful sound—not heat—regardless of basic design principles. Using advanced measurements and data, NAD developed the C 338's highly efficient power supply with a customised Hypex® UCD output stage to pump out 160 watts continuously and over 300 watts instantaneously to meet the demands of the most dynamic music. This new design is very linear over a wide bandwidth and provides consistent, noise-free performance for the amplifying stages with near perfect regulation of voltage.

## Always Ready for Streaming

The C 338 has Chromecast built-in® so you can cast music, tunes, podcasts, and playlists from your favourite apps on your phone, tablet or laptop to your stereo system. Spotify Connect® lets you discover millions of songs and stream them directly to your C 338 using the Spotify® app for a rich, wireless music experience. With the added flexibility of Bluetooth®, your music streaming possibilities are truly limitless with the C 338.

## Always Ready for Streaming

Connect a turntable to the C 338 with its built-in phono preamp that applies the perfect amplification to your vinyl collection. Using a MM phono stage and an innovative low-noise circuit path, the C 338 can reproduce the warmth of LPs with accurate

RIAA equalization and control the infrasonic noise that is in all recordings, without ever affecting the bass response.

## Flexible Connectivity

With a wide array of connections, including a separate headphone amplifier that can drive high-impedance studio monitor headphones, the C 338 is ready for any type of listening. Line inputs can accommodate all kinds of analogue source components, offering ideal input impedance with linear ultra-low noise buffer amplifiers to preserve the musicality of recordings. Also connect a subwoofer with low impedance line outputs and extend the versatility of this budget-friendly, do-it-all amplifier.

## NAD Remote

The NAD Remote transforms your smartphone or tablet into a powerful controller for the C 338. Reinventing the traditional NAD remote control with an intuitive user interface, and the ability to wirelessly control your amp, the NAD Remote can easily control and adjust functions like power, volume, source selection and device settings with a simple tap. The app is available as a free download from the Apple App Store or Google Play Store.

# Specifications C 338

## PREAMPLIFIER

### Line In, Subwoofer Out

THD (20Hz - 20kHz)	<0.005% at 2V out
Signal/Noise Ratio	>106dB (IHF; A-weighted, 500mV out, unity gain)
Input Impedance (R and C)	56 kilohm + 100pF
Maximum input signal	>4.5Vrms (ref. 0.1% THD)
Output impedance	Source Z + 200 ohm
Input sensitivity	50mV (100Hz ref. 500mV out, Volume maximum)
Maximum voltage output -IHF load	>4.5V (ref. 0.1% THD)

### Line In, Headphone Out

THD (20Hz - 20kHz)	<0.005% at 1V out
Signal/Noise Ratio	>105dB (IHF; A-weighted, 32 ohm loads, ref. 2V out, unity gain)
Frequency response	±0.3dB (20Hz - 20kHz)
Channel separation	>56dB at 1kHz
Output impedance	0.5 ohm

## GENERAL SPECIFICATIONS

### Line In, Speaker Out

Continuous Output Power into 4 ohms and 8 ohms (Stereo)	>50W (at rated THD, 20-20kHz, both channels driven)
IHF Dynamic Power	2 ohm 210W
	4 ohm 150W
	8 ohm 80W
THD (20Hz - 20kHz)	<0.03% (250mW to 50W, 8 ohm and 4 ohm)
Signal/Noise Ratio	>98dB (A-weighted, 500mV input, ref. 1W out in 8 ohm)
Clipping power	>60W (at 1kHz 0.1% THD)
Peak output current	>18A (in 1 ohm, 1ms)
Damping factor	>300 (ref. 8 ohm, 20Hz to 6.5kHz)
Frequency response	±0.3dB (20Hz-20kHz)
Channel separation	1kHz >75dB
	10kHz >65dB
Input sensitivity (for 50W in 8 ohm)	Line In: 380mV Digital In: 18% FS
Support bit reate/sample rate	Up to 24bit/192kHz
Standby Power	<0.5W

### Phono In, Speaker Out

THD (20Hz - 20kHz)	<0.03% at 50W out
Signal/Noise Ratio	>82dB (200 ohm source, A-weighted, ref. 500mV out)
	>76dB (MM cartridge source, IHF A-weighted, ref. 500mV out)
Input sensitivity	4.1mV (ref 50W 1kHz 4 ohm out, volume maximum)
Frequency response	±0.3dB (20Hz - 20kHz)
Input impedance (R and C)	47 kilohm + 100pF
Maximum input signal at 1kHz	>80mVrms (ref. 0.1% THD)

## DIMENSIONS AND WEIGHT

Dimensions (W x H x D)	435 x 70 x 285mm (17 1/8 x 2 13/16 x 11 1/4)"
Net Weight	4.85kg (10.7lb)
Shipping Weight	5.85kg (12.9lb)

\* 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.



NAD Electronics International reserves the right to change specifications or features without notice. NAD is a registered trademark of NAD Electronics International. Chromecast is a trademark of Google Inc. 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. © 03/17 17-018 NAD Electronics International. [www.NADelectronics.com](http://www.NADelectronics.com)