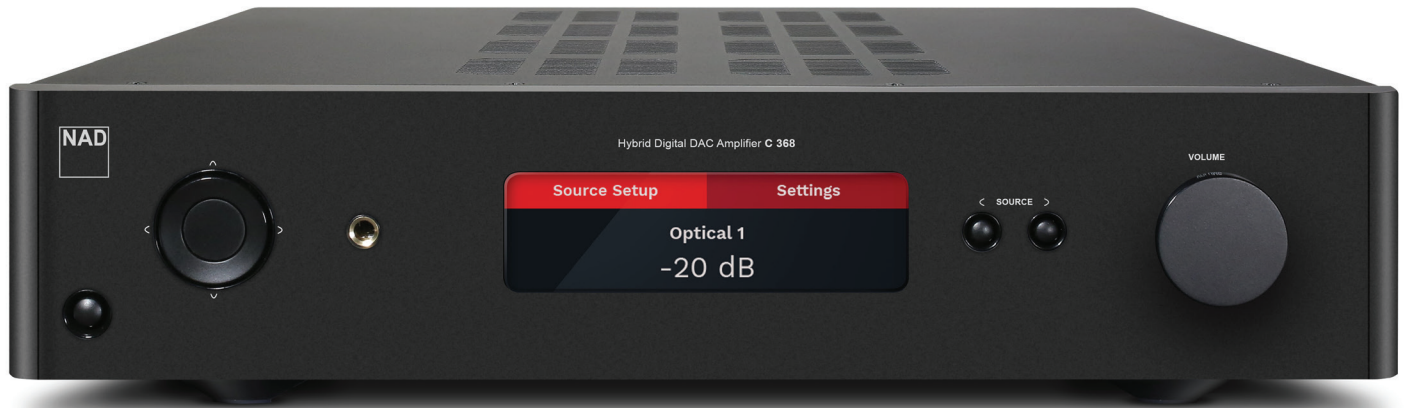




# C 368 HYBRID DIGITAL DAC AMPLIFIER



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

### Introducing the NAD C 368

#### Expansive Power with Unprecedented Flexibility

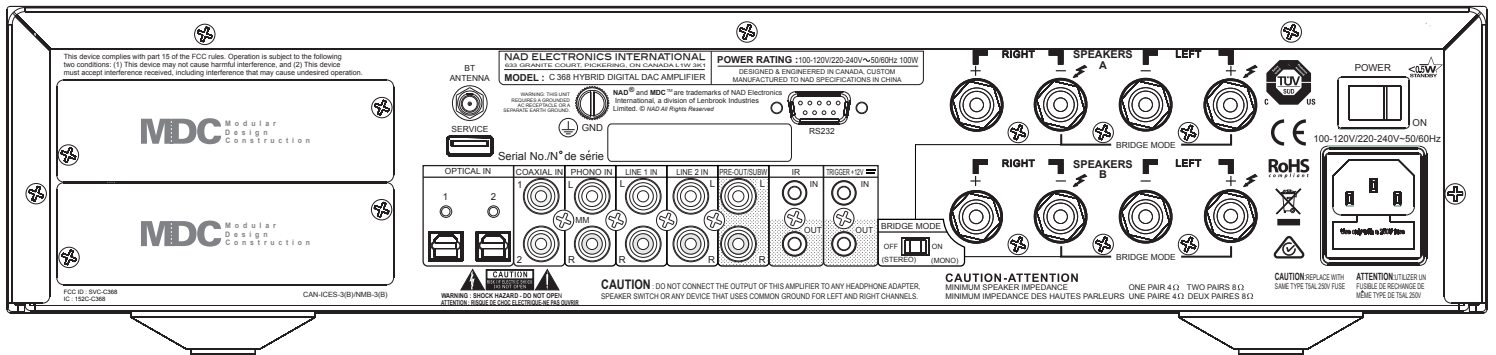
The C 368 ties together all the critical elements of a top performing music system; music sources past, present, and future, in addition to providing a nearly unrestricted reservoir of power that allows your speakers to reveal every nuance of musical detail. This advanced amplifier includes many cutting-edge technological breakthroughs developed by NAD over decades of creating affordable ultra-high performance audio components.

#### 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, precise volume control action, 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. We include an MM Phono stage with precisely accurate RIAA equalization, high overload margins, extremely low noise, and an innovative circuit to suppress infrasonic noise that is present on all LPs – all without affecting bass response. Our line inputs can accommodate all kinds of analogue source components, by offering ideal input impedance characteristics with linear ultra-low-noise buffer amplifiers to prevent any sonic degradation caused by inappropriate loading of the source device. We include a separate headphone amplifier with low output impedance and very high output voltage capability – enough to drive even high impedance studio monitor headphones. Low impedance line outputs that can connect to other amplifiers or subwoofers extend the versatility of this well thought out amplifier. These are all details you can hear.

#### FEATURES & DETAILS

- 80W x 2 Continuous power into 8 or 4 Ohms
- Bluetooth ADP4 with aptX® supported
- MM Phono input
- Analogue line inputs
- USB port for service purposes
- SPDIF coax and optical inputs
- Speaker A, Speaker B
- Stereo or Bridge mode configuration
- Preamp/Subwoofer out
- Headphone amplifier
- MDC Slots for future upgrades
- IR Remote
- Smartphone Control App
- 12V Trigger in/out
- IR in/out
- RS-232 Serial port for control
- Control4, Crestron, RTI, URC, AMX, Savant, Elan certified



## Future-Proof Modular Design

This NAD exclusive feature allows you to customize your NAD amplifier with additional capabilities and features, now or in the future. The two available MDC slots can accommodate a variety of upgrade modules including 4K video capable HDMI switching, additional digital inputs, additional analogue and phono inputs, and one of the most advanced Hi-Res Audio multi-room wireless systems available, the BluOS™ music management system developed by Bluesound. BluOS connects to your network and is controlled via smartphone, tablet or desktop to manage your music collection and connect to a growing list of high-quality streaming music services.

## Connected and Smart

You can connect instantly to the C 368 with Bluetooth® allowing you to stream music wirelessly from any Bluetooth-enabled device. The high performance aptX® codec is fully supported for true CD-quality sound. Bluetooth can also be used to listen to other sources connected to the C 368 via wireless headphones such as NAD's own HP70. There is also a control app that allows your smartphone or tablet to control all functions of your C 368. Adding the optional BluOS Module provides access to your local area network via Wi-Fi or wired Ethernet connection and adds Hi-Res Audio streaming. The BluOS Module also makes the C 368 a single-zone streamer in a complete multi-room wireless music system that is fully compatible with BluOS-enabled music systems and wireless speakers. These are available in a variety of sizes and shapes to fit every room and extend the performance of your primary music system to create a warm ambience of sound in your home.

## Sophisticated Power

NAD has moved away from the old-fashioned power-hungry linear power supplies and Class AB output stages that waste nearly half of the energy consumed and produce 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 and provide consistent performance into all speaker loads, providing a dramatic advance over previous models.

The power supply is capable of 80 watts continuously and over 120 watts instantaneously to allow for short-term musical transients. It can operate with any AC mains voltage from 100 to 240 volts and provides pure DC power to all the various stages of the C 368. 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 368 uses a customized 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 planned and perfectly executed to wring out every last drop of performance.

## Available MDC Upgrade Modules

### MDC BluOS

Adds Wi-Fi/Ethernet Network Connectivity with decoding for all major digital music formats, including Hi-Res Audio to 24/192, and support for local libraries and streaming music services. BluOS is the operating system of a wireless multi-room ecosystem that includes speakers from Bluesound allowing Hi-Res Audio to be distributed to every room in the home.

### DD HDM-1

Adds 3 HDMI In (Stereo PCM only, no Surr. Dolby/DTS decoding) and 1 HDMI Out for video pass through. Full 3D Video support with video resolution up to 1080p/60. Supports 2 channel PCM audio with 24/192 resolution.

# Specifications C 368

## PREAMPLIFIER

### Line Input, Pre Out

THD (20Hz - 20kHz)	<0.005% at 2V out
Signal/Noise Ratio	>106dB (IHF; A-weighted, ref. 500mV out, unity gain)
Channel separation	>80dB (1kHz); >70dB (10kHz)
Input Impedance (R and C)	22 kilohm + 100pF
Maximum input signal	>4.5Vrms (ref. 0.1% THD)
Output impedance	Source Z + 240 ohm
Input sensitivity	93mV (ref. 500mV out, Volume maximum)
Frequency response	±0.03dB (20Hz - 20kHz)
Maximum voltage output -IHF load	>4.5V (ref. 0.1% THD)
Tone Controls	Treble: ±7.0dB at 20kHz; Bass: ±7.0dB at 60Hz; Balance: -10dB

### Phono Input, Pre Out

THD (20Hz - 20kHz)	<0.01% at 2V out
Signal/Noise Ratio	>84dB (200 ohm source; A-weighted, ref. 500mV out) >76dB (MM cartridge source, IHF; A-weighted, ref. 500mV out)
Input sensitivity	1.44mV (ref. 500mV out, Volume maximum)
Frequency response	±0.3dB (20Hz - 20kHz)
Maximum input signal at 1kHz	>80mVrms (ref. 0.1% THD)

### Line Input, Headphone Out

THD (20Hz - 20kHz)	<0.005% at 1V out
Signal/Noise Ratio	>110dB (32 ohm loads; A-weighted, ref. 2V out, unity gain)
Frequency response	±0.3dB (20Hz - 20kHz)
Channel separation	>60dB at 1kHz
Output impedance	6 ohm

## GENERAL SPECIFICATIONS

### Line In, Speaker Out

Continuous Output Power into 4 ohms and 8 ohms (Stereo)	>80W (at rated THD, 20Hz - 20kHz, both channels driven)
Continuous Output Power into and 8 ohms (Bridge mode)	160W (ref. 20Hz - 20kHz at THD 0.03%)
IHF Dynamic Power	2 ohm 250W
	4 ohm 200W
	8 ohm 120W
IHF Dynamic Power (Bridge mode)	2 ohm 400W
	4 ohm 350W
	8 ohm 250W
THD (20Hz - 20kHz)	<0.03% (250mW to 80W, 8 ohm and 4 ohm)
Signal/Noise Ratio	>98dB (A-weighted, 500mV input, ref. 1W out in 8 ohm)
Clipping power	>95W (at 1kHz 0.1% THD)
Clipping power (Bridge mode)	>170W (at 1kHz 0.1% THD)
Peak output current	>20A (in 1 ohm, 1ms)
Damping factor	>300 (ref. 8 ohm, 20Hz to 6.5kHz)
Frequency response	±0.3dB (20Hz - 20kHz)
Channel separation	>75dB (1kHz); >70dB (10kHz)
Input sensitivity (for 80W in 8 ohm)	Line In: 470mV; Digital In: 21% FS
Supports bit rate/sample rate	Up to 24bit/192kHz
Standby Power	<0.5W
Frequency Band	2.402G - 2.480G
Maximum transmit power (dBm)	7dBm ± 2dBm

## DIMENSIONS AND WEIGHT

Dimensions (W x H x D)	435 x 100 x 390mm (17 1/8 x 3 15/16 x 15 3/8)"
Net Weight	7.8kg (17.2lb)
Shipping Weight	10.1kg (22.3lb)

\* 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.



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