



# C 390DD Direct Digital Powered DAC/Amplifier



Our C 390DD DAC/Amplifier is a new concept in amplification and in high definition audio system architecture. Featuring Direct Digital™ technology first introduced in our now famous M2 Direct Digital™ Amplifier, the C 390DD will amaze with its transparent, dynamic and detailed sound quality. The most accurate DAC/amplifier ever devised, the C390DD is packed with loads of power, MDC upgradability, software defined operation (offering simple software updates), and exclusive NAD features. Rethink how a music system should look and sound.

**FDP 2 x 150W**  
Full Discontinuous Power

**DPD**  
Digital PowerDrive™

**MDC** Modular Design Construction

**<0.5W**  
STANDBY

## Features

### > Revolutionary Direct Digital™ Technology

The C 390DD's proprietary Direct Digital™ technology has no analogue stages in the signal path, keeping music in the digital domain right up to the speaker outputs. Preamp functions occur in the digital domain without the phase shift, noise, and distortion that plagues all analogue designs. A 35-bit architecture and a 108MHz master clock also make Direct Digital™ one of the most accurate DAC technologies available. Direct Digital™ also includes a large amount of DSP processing power, which we have fully exploited to give you extra useful features.

### > Immense Power

The C 390DD has a very high continuous power rating of 150W per channel with almost immeasurable distortion and noise. Our exclusive Digital PowerDrive™ circuit senses the speaker load and alters amplifier characteristics to enhance power delivery into your loudspeakers with great efficiency. Digital PowerDrive™ can more than triple the C 390DD's rated power while effortlessly reproducing musical transients with accuracy.

### > New System Architecture

The C 390DD performs the functions of multiple conventional components, so you can change the way your music system is configured. The C 390DD is ready for the world of computer audio with its asynchronous USB input that can directly play 24/192 content from your computer. Connections in front and rear support USB portable flash memory devices and external hard drives (FAT32).

### > Modular Design Construction (MDC)

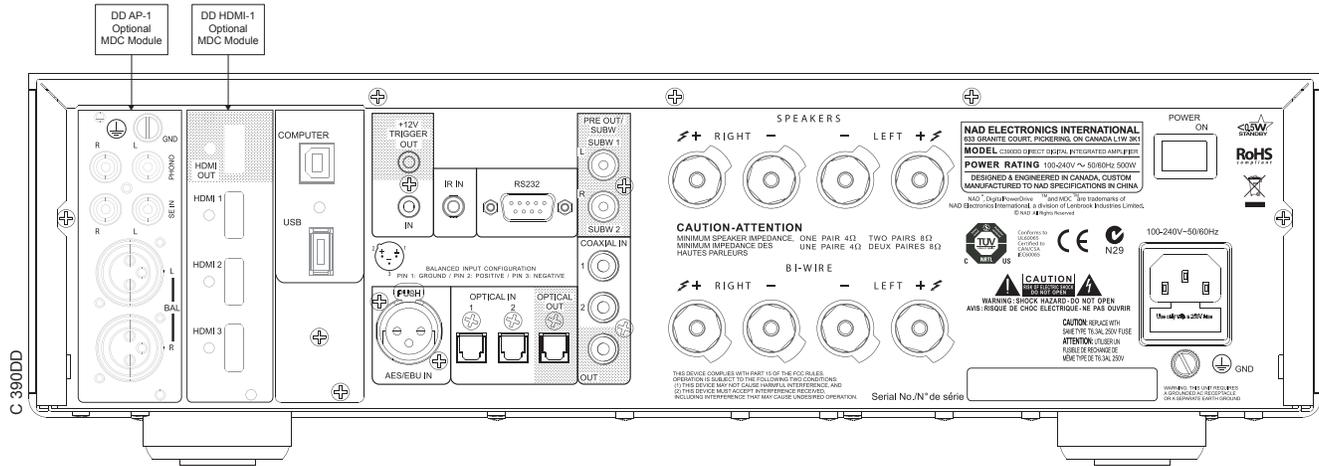
A pure digital system has many advantages, but one drawback is the constantly changing delivery formats for digital content. For this reason, we developed MDC, which places all digital interface circuitry on replaceable modules. The C 390DD now comes standard with one DD USB-2 Module for USB interface, with room for two more modules. Current options are the DD HDM-1 Module (three HDMI inputs, one output), and the DD AP-1 Module with phono preamp for analogue source compatibility with the C 390DD's pure digital circuitry.

### > Exclusive Room EQ

Room EQ is our simple solution to problematic 'room modes' or 'standing waves' that result in undesirable 'boomy' bass. Playing back a supplied test tone sequence easily tames this problem by using your ears and the C 390DD Room EQ filters. Six frequency centres in the low bass region can be cut (or slightly boosted) to remove the 'boom' without reducing the low bass response.

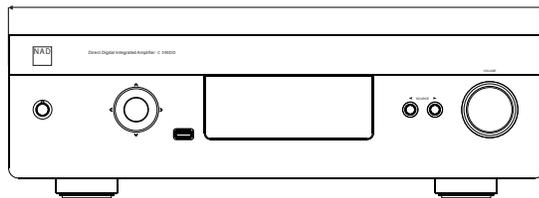
### > Advanced Integration

The C 390DD comes standard with eight inputs, which can be expanded to 14 with the optional MDC modules. Inputs can be activated or hidden, and can be renamed for the source component attached. Listening Mode, Polarity, and NAD Soft Clipping are all easily selected and adjusted. RS-232, IR Inputs/Outputs and 12V triggers all make integration with home automations systems simple and effective.

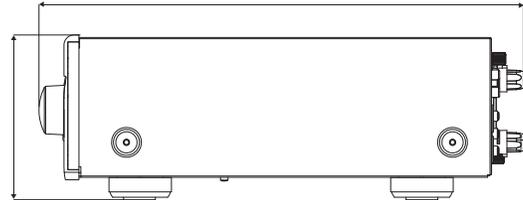


Total Width 435mm

Total Depth 388mm



Total Height 132mm



## Specifications

DIGITAL INPUT (COAXIAL, OPTICAL, USB)		C 390DD
Input Impedance		75 ohms (coaxial) 110 ohms (AES/EBU)
Sample Rate		32kHz to 192kHz
Frequency Response		±0.5dB (ref. 20Hz-96kHz @ 192kHz)
Channel Separation		>90dB (ref. 10kHz, 4 ohm, 1/3 rated power)
OVERALL SPECIFICATIONS		
Continuous Output Power (ref. 20Hz - 20kHz, rated THD)	8 ohm 4 ohm	≥150W ≥150W
Rated Distortion (THD, with AES17 and AP passive 20kHz LP filters)		<0.005% (ref. 20Hz - 20kHz, 500mW - rated power)
Clipping Power		>165W (ref. 1kHz, 8 ohm, 0.1% THD)
IHF Dynamic Power	8 ohm 4 ohm	160W 350W
Maximum Output Current		>18A
Signal / Noise Ratio		>95dB (A-weighted, ref. 1W) >124dB (A-weighted, ref. 250W)
Damping Factor		>800 (ref. 20Hz - 200Hz)
GENERAL		
Idle Power		100W
Standby Power		<0.5W
Unit Dimensions (WxHxD) - Gross*		435 x 132 x 388mm 17 1/8 x 5 1/4 x 15 5/16 inches**
Net Weight		7.7kg (16.94lb)
Shipping Weight		9.78kg (21.5lb)

\* 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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