

# D 3045 HYBRIDDIGITAL™ DAC AMPLIFIER















## The Amp With All the Ins and Outs

The NAD D 3045 is everything a modern amplifier should be; compact, energy efficient, powerful, silent, high-resolution enabled, and packed with cutting edge features like DSD and MQA playback. NAD's expertise in both digital and analogue engineering is on full display in this flexible and affordable amplifier.

## **Higher Fidelity**

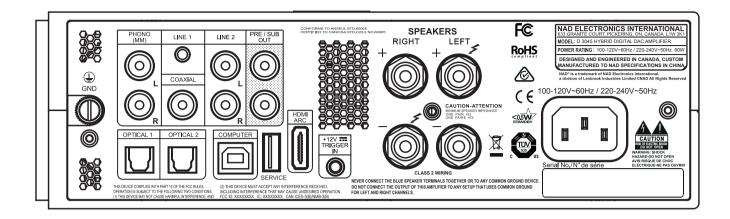
Hi-Res is to audio, what HD is to video. It is more lifelike, natural, and a much more enjoyable listening experience. With features like support for MQA music, the D 3045 can faithfully and accurately reproduce the full spectrum of sound encapsulated on the studio master. Until now, music loving consumers have only been able to hear an edited version of the full fidelity because the delivery systems, be it tape, vinyl, or CD, did not have the capacity to hold all the information contained in the studio-master recording. With hi-res downloads and streaming we can now enjoy exactly the same experience the artist heard in the studio when the recording was first made. This is revolutionary! Yet, 90% of the products on the market today do not have the full capability required to experience this new higher fidelity.

## **Amazing Capability**

Every input and circuit you need to get the best out of your existing music collection is included, plus features that allow you to experience the sonic benefits of hi-res audio. Especially notable is the Asynchronous USB input for attaching a computer which allows hi-res streaming using one of the several hi-res programs like Roon, JRiver, and

#### FFATURES & DETAILS

- 2 x 60W Hybrid Digital Amplifier
- Two-Way Bluetooth powered by Qualcomm aptX HD audio
- Asynchronous USB 24/192 Input supporting MQA and DSD
- **HDMI** Audio Return Channel
- Coax and Optical Input
- MM Phono and Line Input
- Preamp Out
- Sub Out
- Headphone Amp
- IR Remote



Amarra. Asynchronous operation uses the D 3045's precision clock (instead of the computer's clock) to reduce jitter to a minimum and make the USB format work ideally for audio. For everyday convenience we have included Bluetooth wireless streaming powered by aptX HD, the latest 24 bit hi-res version of Bluetooth that is being supported by more and more phones and tablets. You can also use its integrated two-way Bluetooth feature, and effortlessly stream music that is playing on the amp to any pair of Bluetooth enabled headphones. Or you can plug in your headphones to the built-in headphone jack and enjoy the exceptional performance of our low impedance, high current headphone amplifier.

### Features You Won't Find Anywhere Else

Love vinyl? The D 3045 features NAD's super accurate, wide dynamic range, moving magnet phono preamp to extract every last morsel of sound from your LPs. If you still enjoy CDs, we have both analogue and digital inputs. The digital inputs allow the use of the advanced hi-res DAC built into the D 3045, or you can even send the sound from your TV to the NAD amplifier and seamlessly control the system using your TV's remote by taking advantage of the HDMI ARC input. You can even add a subwoofer to the system with the convenient Sub Out jack.

### **Performance and Price**

The NAD D 3045 includes advanced capabilities usually only found in far more expensive components. Hi-Res USB DACs start at about 3X the price of the D 3045. High current headphone amplifiers start at the price of the D 3045 and go up from there. Power amps featuring 60wpc and with the low distortion and high current capability of the D 3045 are rare at this price. Yet all these products are wrapped into one compact, energy efficient, and convenient package engineered by one of audio's most iconic brands. Forty-five years of audio excellence is on full display with this innovative and versatile component. Just add your favourite music source and a great set of speakers to enjoy many years of sonic bliss.

## Specifications D 3045

All specifications 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.

#### PREAMPLIFIER SECTION

#### LINE INPUT/PRE OUT

THD (20Hz – 20kHz) <0.01% at 2V out

Signal-to-Noise Ratio >100dB (IHF, A-weighted, ref. 500mV out, unity gain)

Channel separation >85dB (1kHz)

>80dB (10kHz) 47kohms + 220pF

Input impedance (R and C) 47kohms + 220pF

Maximum input signal >5.5Vrms (ref. 0.1% THD)

Output impedance 400 Ohms

Input sensitivity 82mV (ref. 500mV out, Volume maximum)

Frequency response  $\pm 0.2$ dB (20Hz - 20kHz) Maximum voltage output - IHF load >4V (ref. 0.1% THD)

PHONO INPUT/PRE OUT

THD (20Hz – 20kHz) <0.015% at 2V out

Signal-to-Noise Ratio >82dB (200 Ohm source, A-weighted, ref. 500mV out)

>76dB (MM cartridge source, IHF; A-weighted, ref. 500mV out)

Input sensitivity 1.35mV (ref. 500mV out, Volume maximum)

Maximum input signal at 1kHz >90mVrms (ref. 0.1% THD) Frequency response  $\pm 0.3dB$  (20Hz - 20kHz)

Note: The RIAA response is consistent with a pre-emphasis that is rolled off at 50kHz by a second order filter, such as used in Neumann cutting lathes.

#### LINE INPUT/HEADPHONE OUT

THD (20Hz – 20kHz) <0.003% at 120mW

Signal-to-Noise Ratio >90dB (32 Ohm load; A-weighted, ref. 500mV out, unity gain)

Frequency response  $\pm 0.3 dB (20 Hz - 20 kHz)$ 

Output impedance 2 Ohms

Maximum headphone output - 32 Ohm load <8V (ref. 0.1% THD)

#### GENERAL SPECIFICATIONS LINE INPUT/SPEAKER OUT

Continuous output power into 4 and 8 Ohms 60W (ref. 20Hz-20kHz at 0.03% THD, both channels driven)

THD (20Hz – 20kHz) <0.005% (at 1W, 4 and 8 ohms)

Signal-to-Noise Ratio >98dB (A-weighted, 500mV input, ref. 2.828V out in 4 0hms)

Clipping power >80W (at 1kHz 4 0hms 0.1% THD)

IHF dynamic power 8 Ohms: 80W

4 Ohms: 150W 2 Ohms: 200W >18A (in 1 Ohm, 1ms)

Peak output current >18A (in 1 0hm, 1ms)
Damping factor >300 (ref. 8 0hms, 20Hz to 6.5kHz)

Frequency response  $\pm 0.3 dB (20 Hz - 20 kHz)$ 

Channel separation >75dB (1kHz)

>70dB (10kHz)

Input sensitivity 260mV (for 30W in 4 0hms)
Supports bit rate/sample rate up to 24 bit/192kHz (digital source)

up to 24 bit/384kHz (computer source)

Standby power <0.5W

#### **DIMENSION AND WEIGHT**

Gross dimensions (W x H x D)\*  $70 \times 235 \times 265 \text{ mm}$ 

2 13/16 x 9 5/16 x 10 7/16 inches\*\*

 Net weight
 3.6kg (7.9lb)

 Shipping weight
 2.6kg (5.7lb)

<sup>\*</sup> Gross dimension includes feet, volume knob and extended 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.

