

C 3050 STEREOPHONIC AMPLIFIER



NAD C 3050 STEREOPHONIC AMPLIFIER

Paying tribute to NAD's 50-year history of innovation and value, the C 3050's vintage design was inspired by the NAD 3030 Stereophonic Amplifier, a 1970s classic. Retro design elements include dual VU meters, push-button input selectors, a walnut-finished vinyl-clad cabinet, and a dark grey front panel with the original New Acoustic Dimension logo in its 1970s cursive typeface. Underneath its vintage-inspired exterior are advanced features like a HybridDigital UcD output stage, high-performance Texas Instruments PCM5242 differential DAC, and NAD's MDC2 future-proofing technology. Listeners can add exciting new capabilities like BluOS high-resolution multi-room streaming and Dirac Live room correction to the C 3050 by inserting an optional module into the MDC2 expansion slot on the rear panel.

AMPLIFIER INNOVATION

Employing NAD's proven HybridDigital UcD amplifier technology, the C 3050 can deliver 100 Watts per channel of continuous power and 135Wpc of instantaneous peak power for effortless reproduction of musical transients. Noise and distortion are virtually unmeasurable through the entire audio-band. The result is neutral, distortion-free sound through any loudspeaker load—even at high listening levels. The C 3050 will reproduce the music you love with wonderful detail, immersive three-dimensionality, and thrilling dynamics.

The C 3050's digital section is built around Texas Instruments' PCM5242 high-resolution differential DAC, a design known for its excellent dynamic performance and immunity to clock jitter. This enables the C 3050 to deliver amazing musicality, stunning clarity, and pinpoint sound-staging from all your digital sources.

FEATURES & DETAILS

<0.5W

- Retro design elements include front-panel VU meters, push-button input controls, 1970s cursive branding, walnut-finished vinyl-clad cabinet, and dark grey front panel
- HybridDigital UcD Amplifier
- Continuous Power: 100 Watts per channel into 8/4 ohms
- Instantaneous Power: 135 Watts per channel
- Vanishingly low harmonic and intermodulation distortion
- MDC2 port for expanded functionality
- Optional MDC2 BluOS-D module adds BluOS high-resolution
 multi-room music streaming and Dirac Live** room correction
- High-performance TI PCM5242 differential DAC
- Ultra-low-noise MM phono stage with infrasonic filtering circuitry
- One optical, one coaxial digital input
- Pre-amp out / Main-in connections
- HDMI-eARC input
- One set of line-level analogue inputs with low-noise buffer amplifiers
- Speaker A/Speaker B outputs
- Subwoofer output
- Dedicated headphone amplifier
- IR remote control
- CI-Friendly, 12V Trigger out, IR in



READY FOR THE FUTURE

The C 3050 features the latest generation of NAD's Modular Design Construction future-proofing technology, MDC2, which lets users add new functions and features by inserting a module into the MDC2 slot on the back panel. The optional MDC2 BluOS-D module delivers two highly desirable capabilities: BluOS high-resolution music streaming and Dirac Live room correction.

MUSIC EVERYWHERE

Featuring dual-band Wi-Fi and Gigabit Ethernet, the MDC2 BluOS-D connects you to almost all the music ever recorded through BluOS, the award-winning wireless music-management system. With the MDC2 BluOS-D installed, the C 3050 can be part of a whole-home music system with as many as 64 zones.

BluOS has integrated support for more than 20 popular streaming services, including several that offer lossless and high-resolution audio, such as Amazon Music Ultra HD, Deezer, Qobuz, and Tidal. BluOS supports high-resolution audio to 24-bit/192kHz, and has MQA decoding and rendering capability, for studio-quality streaming. The MDC2 BluOS-D also lets you play music from your personal library and thousands of internet radio stations through the C 3050.

You can select music using the intuitive BluOS Controller app, available for Android, iOS, macOS, and Windows. The MDC2 BluOS-D supports Spotify Connect and Tidal Connect, so you can cue up music in the apps for those services, then transfer playback to the C 3050. Also supported is Apple AirPlay 2, so you can stream audio to the MDC2 BluOS-D from any app on an iPhone, iPad or Macintosh computer. You can also control playback by voice using Amazon Alexa, Google Assistant, or Apple Siri. Bidirectional aptX HD Bluetooth connectivity lets you stream audio to the MDC2 BluOS-D from a smart device and stream audio from the C 3050 to a pair of wireless headphones.

TUNE YOUR ROOM

The optional MDC2 BluOS-D lets C 3050 owners address the weakest link in most music systems-the listening environment. Connect the supplied microphone to the MDC2 BluOS-D's USB port, and then follow instructions in the easy-to-use Dirac Live** app. Dirac will play test tones through your speakers, analyze the results, and then create correction filters that counteract common acoustic problems like standing waves and unwanted reflections. You can create up to five settings for different listener positions or room conditions, for example whether the drapes are open or closed.

With Dirac Live enabled, you'll enjoy deeper and tighter bass, vastly improved tonal accuracy, greater clarity, and more precise imaging. Because MDC2 enables twoway communications between the expansion module and host component, you'll experience these transformative benefits with all sources connected to the C 3050.

PLUG AND PLAY

With its full suite of digital and analogue inputs, the C 3050 can accommodate all your source components. In addition to an ultra-low-noise MM phono input for connecting a turntable and an HDMI eARC port for connecting an HDTV, the C 3050 has a pair of line-level analogue input and coaxial and optical digital inputs. Listeners can connect two pairs of speakers with Speaker A/B switching, as well as a subwoofer. The C 3050 also has a dedicated headphone amplifier, and pre-out/main-in jacks that let you connect a more powerful amplifier and or the C 3050 as a preamp only. The C 3050 includes an IR remote control and has installer-friendly features like 12V trigger and IR input.

A FEAST FOR THE SENSES

With its vintage-inspired design and innovative technology, the NAD C 3050 Stereo Integrated Amplifier is a feast for the eyes and ears. The C 3050's MDC2 port makes it easy to add compelling features like BluOS multi-room streaming and Dirac Live room correction—not to mention new capabilities that have yet to be developed. In the C 3050, NAD's 50-year history of amplifier innovation meets the future of hi-fi.

Specifications C 3050

All specs 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 (ANALOG BYPASS ON)	>100 dB (1 kHz), >90 dB (10 kHz)
THD+N (20 Hz – 20 kHz)	<0.005 % at 2V out
Signal-to-Noise Ratio	>95 dB (IHF; A-weighted, ref. 500 mV out, unity gain)
Channel separation	>86W(at 1KHz 0.1% THD 8Rx2CH) >102W(at 1KHz 0.1% THD)
Input impedance (R and C)	28 kohms + 360 pF
Maximum input signal	>4.5 Vrms (ref. 0.1 % THD)
Output impedance	440 ohms
Input sensitivity	270 mV (ref. 500 mV out, Volume maximum)
Frequency response	±0.3 dB (20 Hz - 20 kHz)
Maximum voltage output -IHF load	>2 V (ref. 0.1 % THD)
PHONO INPUT, PRE-OUT (ANALOG BYPASS ON)	
THD (20 Hz – 20 kHz)	<0.03% at 2 V out
Signal-to-Noise ratio	>79 dB (200 ohms source; A-weighted, ref. 500 mV out)
Input Impedance (R and C)	46 kohms/100 pF
Input sensitivity	5.5 mV (ref. 500 mV out, Volume maximum)
Frequency response	±0.3 dB (20 Hz - 20 kHz)
Maximum input signal at 1kHz	>80 mVrms (ref. 0.1 % THD)
LINE INPUT, HEADPHONE OUT (ANALOG BYPASS ON)	
THD (20 Hz – 20 kHz)	<0.005% at 1V out
Signal-to-Noise Ratio	>96 dB (32 ohms loads; A-WTD, ref. 2 V out, unity gain
Frequency response	±0.3 dB (20 Hz - 20 kHz)
Channel separation	>60 dB at 1kHz
Output impedance	2.2 ohms
CONNECTIVITY	
Bluetooth quality	aptX HD 5.0
Bluetooth connectivity	One-Way
USER INTERFACE	
Supported operating system	Music playback from network shares on the following desktop operating systems: Microsoft
	Windows XP, 2000, Vista, 7, 8 to current Windows Operating Systems and macOS versions
Mobile Application	Free BluOS Controller App available for download from the respective App stores of Apple iOS
Mobile Application	devices (iPad, iPhone and iPod), Android devices, Kindle Fire and Windows or macOS desktops
	devices (if ad, if none and if ou), Android devices, Kindle file and Windows of macoo desktops
GENERAL SPECIFICATIONS	
MAIN IN, SPEAKER OUT	
Continuous output power into 8 ohms and 4 ohms	100W (ref. 20 Hz-20 kHz at rated THD, both channels driven)
THD (20 Hz – 20 kHz)	<0.03% (250 mW to 100 W, 8 ohms and 4 ohms)
Signal-to-Noise Ratio	>95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms)
0	>95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms)
Clipping power	>95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD)
Clipping power IHF dynamic power	>95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W
Clipping power IHF dynamic power Peak output current	>95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms)
Clipping power IHF dynamic power Peak output current Frequency response	>95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz)
Clipping power IHF dynamic power Peak output current	>95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz) >75dB (1 kHz)
Clipping power IHF dynamic power Peak output current Frequency response Channel separation	>95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz) >75dB (1 kHz) >70dB (10 kHz)
Clipping power IHF dynamic power Peak output current Frequency response	>95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz) >75dB (1 kHz) >70dB (10 kHz) 540 mV
Clipping power IHF dynamic power Peak output current Frequency response Channel separation Input sensitivity (for 100 W in 8 ohms)	>95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz) >75dB (1 kHz) >70dB (10 kHz)
Clipping power IHF dynamic power Peak output current Frequency response Channel separation Input sensitivity (for 100 W in 8 ohms) Power consumption	>95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz) >75dB (1 kHz) >70dB (10 kHz) 540 mV Digital: -6dBFS
Clipping power IHF dynamic power Peak output current Frequency response Channel separation Input sensitivity (for 100 W in 8 ohms)	>95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz) >75dB (1 kHz) >70dB (10 kHz) 540 mV
Clipping power IHF dynamic power Peak output current Frequency response Channel separation Input sensitivity (for 100 W in 8 ohms) Power consumption	>95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz) >75dB (1 kHz) >70dB (10 kHz) 540 mV Digital: -6dBFS
Clipping power IHF dynamic power Peak output current Frequency response Channel separation Input sensitivity (for 100 W in 8 ohms) Power consumption at Auto Standby ON	>95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz) >75dB (1 kHz) >70dB (10 kHz) 540 mV Digital: -6dBFS
Clipping power IHF dynamic power Peak output current Frequency response Channel separation Input sensitivity (for 100 W in 8 ohms) Power consumption at Auto Standby ON DIMENSIONS AND WEIGHT	 >95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz) >75dB (1 kHz) >70dB (10 kHz) 540 mV Digital: -6dBFS 0.5 W* 447 x 127 (height, including feet) x 335mm (depth, including rear speaker terminal and front knob)
Clipping power IHF dynamic power Peak output current Frequency response Channel separation Input sensitivity (for 100 W in 8 ohms) Power consumption at Auto Standby ON DIMENSIONS AND WEIGHT Gross dimensions (W x H x D)***	 >95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz) >75dB (1 kHz) >70dB (10 kHz) 540 mV Digital: -6dBFS 0.5 W* 447 x 127 (height, including feet) x 335mm (depth, including rear speaker terminal and front knob) (17 5/8 x 5 x 13 3/16 inches)
Clipping power IHF dynamic power Peak output current Frequency response Channel separation Input sensitivity (for 100 W in 8 ohms) Power consumption at Auto Standby ON DIMENSIONS AND WEIGHT Gross dimensions (W x H x D)*** Net weight	 >95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz) >75dB (1 kHz) >70dB (10 kHz) 540 mV Digital: -6dBFS 0.5 W* 447 x 127 (height, including feet) x 335mm (depth, including rear speaker terminal and front knob) (17 5/8 x 5 x 13 3/16 inches) 10 kg (22 lbs)
Clipping power IHF dynamic power Peak output current Frequency response Channel separation Input sensitivity (for 100 W in 8 ohms) Power consumption at Auto Standby ON DIMENSIONS AND WEIGHT Gross dimensions (W x H x D)***	 >95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz) >75dB (1 kHz) >70dB (10 kHz) 540 mV Digital: -6dBFS 0.5 W* 447 x 127 (height, including feet) x 335mm (depth, including rear speaker terminal and front knob) (17 5/8 x 5 x 13 3/16 inches)
Clipping power IHF dynamic power Peak output current Frequency response Channel separation Input sensitivity (for 100 W in 8 ohms) Power consumption at Auto Standby ON DIMENSIONS AND WEIGHT Gross dimensions (W x H x D)*** Net weight	 >95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz) >75dB (1 kHz) >70dB (10 kHz) 540 mV Digital: -6dBFS 0.5 W* 447 x 127 (height, including feet) x 335mm (depth, including rear speaker terminal and front knob) (17 5/8 x 5 x 13 3/16 inches) 10 kg (22 lbs)
Clipping power IHF dynamic power Peak output current Frequency response Channel separation Input sensitivity (for 100 W in 8 ohms) Power consumption at Auto Standby ON DIMENSIONS AND WEIGHT Gross dimensions (W x H x D)*** Net weight	 >95dB (A-weighted, 500 mV input, ref. 1 W out in 8 ohms) >115 W (at 1 kHz 0.1 % THD) 8 ohms: 180 W, 4 ohms: 250 W, 2 ohms: 300 W >20A (in 1 ohm, 1 ms) ±0.3 dB (20 Hz - 20 kHz) >75dB (1 kHz) >70dB (10 kHz) 540 mV Digital: -6dBFS 0.5 W* 447 x 127 (height, including feet) x 335mm (depth, including rear speaker terminal and front knob) (17 5/8 x 5 x 13 3/16 inches) 10 kg (22 lbs)

* After 20 minutes of no user interface interaction and no active source input

** 500Hz limited version of Dirac Live included. Full bandwidth license can be purchased from Dirac.com

Specifications are subject to change without notice. For updated documentation and features, please check out www.NADelectronics.com for the latest information about C 3050.



NAD Electronics International reserves the right to change specifications or features without notice. NAD is a registered trademark of NAD Electronics International. 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. © 09/22 22-035 NAD Electronics International. www.NADelectronics.com