



# NAD C 658 BLUOS STREAMING DAC



## Introducing the NAD C 658

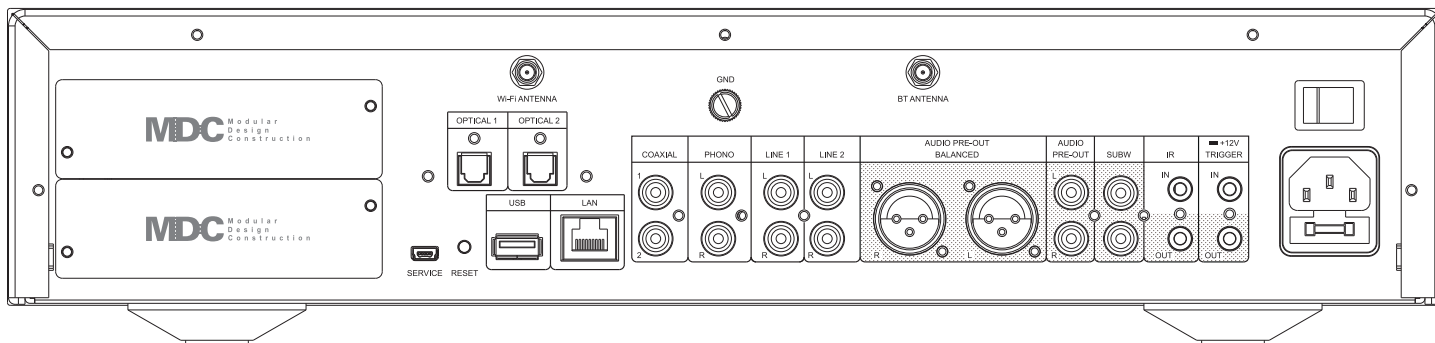
The NAD C 658 is a new kind of stereo component, one that at once changes preconceptions and opens new possibilities for audio reproduction. You see, there has never before been a component offering such a rich palette of both new and proven technology. Bold statements? Read on.

## REDEFINING THE ARCHITECTURE OF HI-FI PLAYBACK

As we move deeper into the 21st Century the way music is distributed and enjoyed continues to evolve away from physical media to streaming. It also has moved away from analogue to digital. The C 658 has incorporated these fundamental truths to create an entirely new type of component that combines a network streamer, a state-of-the-art DAC, and many aspects of the traditional preamplifier into a single highly cost effective package. And thanks to NAD's exclusive Modular Design Construction, it will keep pace with the latest technology, not yet introduced, but inevitably coming in the future. In fact, an optional HDMI 4K switcher module is available now allowing the best sound from any of the many HDMI sources available (like game consoles and video STBs). While the C 658 immediately replaces (or adds) your streamer, DAC, and preamp, it also adds many new features you may not be aware of, like a Qualcomm aptX HD Bluetooth transmitter to use with your wireless headphones. The highly flexible outputs allow for a true balanced connection to powered speakers or amplifiers. Single-ended connections for amplifiers and subwoofers are also provided and include an adjustable subwoofer crossover executed perfectly in the digital domain. A highly sophisticated MM phono input is also included along with line inputs for legacy analogue components.

## FEATURES & DETAILS

- BluOS Network Streaming with MQA Decoding
- ESS Sabre DAC
- Dirac Live Room Correction
- Gigabit Ethernet
- Dual Band Wi-Fi 5 802.11ac
- 2-way Qualcomm aptX HD Bluetooth
- 2 x MDC Slots for Future Expansion
- MM Phono Input
- 2 x Line Inputs
- 2 x Optical Inputs
- 2 x Coax Inputs
- Balanced Preamp Output
- Preamp Output
- Mono Subwoofer Output
- High Current Headphone Out
- USB socket for adding optional wireless output module
- IR In with Learning Function
- Trigger Out/In



## BLUOS ENABLED

Also on board is BluOS, the most sophisticated High Res streaming system available. BluOS natively supports over 15 streaming music services and indexing of over 250,000 tracks from local network sources. The C 658 becomes a node in the BluOS ecosystem allowing high res network streaming to 64 zones and control options for iOS, Android, Windows, and Mac OS phones, tablets, and desk top devices. BluOS also supports all major smart home controllers and is available in a wide range of products making it easy to create a whole house audio system with the C 658 at its heart.

## HIGH RESOLUTION IN EVERY DETAIL

Most NAD components have been High Res for 45 years with very wide bandwidth, low distortion, and ultra-low noise. We just never had High Res source material to play. With High Res digital recording and streaming, combined with advanced technology like MQA, record companies are opening their vaults and releasing Studio Master Quality recordings. MQA decoding is available through BluOS Streaming content. The C 658 is pure High Res from input to output and features the ESS Sabre 32bit DAC, one of the best performing DACs on the market today with its 118dB Dynamic Range and incredibly low jitter spec. All preamp functions are executed in the digital domain including the same wide range non-truncating digital volume control used in our Masters Series components. This offers an incredibly short analog signal path that, rather uniquely, is identical for all volume settings. Sophisticated active power supplies provide super clean voltages to all circuits to keep noise and distortion at the edge of measurability.

## MAKE THE SPEAKERS DISAPPEAR (IT'S NOT MAGIC)

The C 658 is also the first NAD stereo component to feature Dirac Live room correction\*, the most sophisticated and effective room correction available. Dirac corrects the impulse response of your speakers, in addition to the frequency response of your room, for a truly transparent window into the musical performance. When the room resonances are tamed and the transient response is corrected, the result is magical. You have never heard your speakers sound this invisible or this good!

## TRADITIONAL NAD PERFORMANCE AND VALUE

The C 658 is part of our Classic Series of components which have an enviable reputation for giving Music Lovers more enjoyment for less money. If you want a solid block of hand-crafted aluminum with gold plated accents you'll need to look elsewhere. If you want state-of-the-art performance and features in a sturdy no-nonsense package then you have the right address.

# Specifications C 658

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

### LINE INPUT, PRE-OUT

THD (20Hz - 20kHz)	<0.005% at 2V out
Signal-to-Noise Ratio	>106dB (IHF; A-weighted, ref. 500mV out, unity gain)
Channel separation	>80dB (1kHz); >70dB (10kHz)
Input Impedance (R and C)	22 kohms + 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	±0.3dB (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, AUDIO PRE-OUT

THD (20Hz - 20kHz)	<0.01% at 2V out
Signal-to-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-to-Noise Ratio	>110dB (32 Ohms loads; A-WTD, ref. 2V out, unity gain)
Frequency response	±0.3dB (20Hz - 20kHz)
Channel separation	>60dB at 1kHz
Output impedance	6 Ohms

## DAC

Supported audio file formats	MP3, AAC, WMA, OGG, WMA-L, ALAC, OPUS
High resolution audio formats	MQA, FLAC, WAV, AIFF
Native sampling rates	up to 32bit/384kHz
Bit depths	16 – 24

## BluOS

Supported operating systems	Plays music from network shares on the following desktop operating systems: Microsoft Windows XP, 2000, Vista, 7, 8 to current Windows Operating Systems and Mac OS X versions
User interface mobile operating system	BluOS – Free Android and iOS App available online at Google Play and Apple App store
Supported cloud services**	Spotify, Amazon Music, TIDAL, Deezer, Qobuz, HDTracks, HighResAudio, Murfie, JUKE, Napster, Slacker Radio, KKBox, Bugs
Free internet radio**	TuneIn Radio, iHeartRadio, Calm Radio, Radio Paradise
Bluetooth quality	Bluetooth aptX HD wireless built-in
Bluetooth connectivity	Two-Way (Transmit and Receive)
Network connectivity	Gigabit Ethernet RJ45 WiFi 5 (802.11ac)

## DIMENSIONS AND WEIGHT

Dimensions (W x H x D)***	435 x 100 x 405mm (17 1/8 x 3 15/16 x 16)“
Shipping Weight	10.1kg (22.3lb)

\* The C 658 will include a license for Dirac Live with the option for advanced users to upgrade to a Dirac Live Full Frequency version. These features will be implemented via future software upgrades.

\*\* Supported cloud services and free internet radio are subject to change without notice.

\*\*\* Gross dimension includes feet, volume knob and extended rear panel terminals including installed antennas.

Specifications are subject to change without notice. For updated documentation and features, please check out [www.NADelectronics.com](http://www.NADelectronics.com) for the latest information about C 658.

