



MASTERS

# M66 BLUOS™ STREAMING DAC-PREAMPLIFIER



## MASTERS M66 BLUOS STREAMING DAC-PREAMPLIFIER ▼

Not only is the Masters M66 BluOS streaming DAC-preamplifier the most advanced preamplifier NAD has ever offered, it represents an entirely new class of hi-fi separate components. In addition to a plethora of inputs, including MM/MC phono and HDMI eARC, the M66 incorporates an audiophile-grade DAC and a high-resolution multi-room music streamer.

Along with the full frequency version of Dirac Live Room Correction, the M66 features Dirac Live Bass Control, allowing independent control of each connected subwoofer, for smooth, consistent response throughout your listening room. The combination of Dirac Live Room Correction and Dirac Live Bass Control enables the M66 with its 4 independent subwoofer outputs to deliver more accurate in-room performance than any two-channel component ever offered.

With its elegant aluminium casework, super-smooth volume control, and vibrant 7" touchscreen, the M66 exudes class and quality. Visually, sonically, and technologically, it's an ideal match to NAD's award-winning Masters M23 power amplifier. Of course, the Masters M66 BluOS Streaming DAC-Preamplifier can be paired with any high-performance power amplifier.

## MUSIC EVERYWHERE ▼

The M66 has Wi-Fi, Ethernet connectivity and a high-resolution network streamer based on the acclaimed BluOS multi-room music-management system. Using the intuitive BluOS app on a smart device or personal computer, listeners can cue up music from their personal collections, thousands of Internet radio stations, and more than 20 streaming services, in resolution up to 24-bit/192kHz. The M66 has full MQA decoding and rendering capability.

You can have music playing in just one room; or you can share music over your home network with up to 63 additional BluOS-enabled components from NAD and other hardware partners. The M66 integrates easily with home-control systems from Control4, Crestron, ELAN, RTI, URC, and others.

## FEATURES & DETAILS

- ▶ Ethernet and Wi-Fi networking
- ▶ BluOS network streamer provides access to over 20 streaming services, including several that deliver lossless and high-resolution audio
- ▶ Flagship ESS Sabre ES9038PRO DAC and ES9822PRO ADC chips
- ▶ Innovative Dynamic Digital Headroom (DDH) circuit eliminates digital intersample peak clipping distortion
- ▶ Full MQA hardware decoding and rendering
- ▶ Support for audio casting technologies like Apple Airplay 2, Tidal Connect, etc.
- ▶ Seamless integration with smarthome control systems such as Crestron, Control4, ELAN, RTI, URC, and others
- ▶ Dirac Live Room Correction full frequency version
- ▶ Four balanced and four unbalanced subwoofer outputs
- ▶ Dirac Live Bass Control enables seamless blend between the subwoofer(s) and main speakers, and smooth bass response throughout the listening area
- ▶ Ultra-quiet MM/MC phono stage with precise RIAA equalization, high overload margins, and infrasonic filter
- ▶ HDMI port with ARC and eARC support
- ▶ Two optical and two coaxial S/PDIF inputs, one AES/EBU balanced digital input, two pairs of RCA line-level analogue inputs, one pair of XLR balanced inputs
- ▶ Dedicated headphone amplifier with low output impedance and very high output voltage capability
- ▶ Ultra-precise resistor-ladder volume control for analogue signals
- ▶ 7" front-panel touchscreen
- ▶ Elegant aluminium casework
- ▶ Two MDC2 expansion slots for adding future capabilities



## WORK THE ROOM ▼

The M66 integrates Dirac Live Bass Control. Connect the supplied calibrated microphone to the M66's USB port and then launch the Dirac Live app on a smart device or personal computer. Alternatively, connect the mic directly into a laptop or computer running Dirac. The app will walk you through the calibration process, and then generate correction filters that compensate for acoustic problems like standing waves and unwanted reflections. You'll enjoy vastly improved clarity, more precise imaging, improved timbral accuracy, and deeper, tighter bass.

In a world's first for a stereo component, the M66 features four balanced subwoofer outputs and integrates the full version of Dirac Live Bass Control, which allows independent calibration of multiple subwoofers. Dirac Live Bass Control optimises subwoofer output in both the frequency and time domains. The result is a seamless blend between the subwoofer(s) and main speakers, resulting in a smooth, consistent bass response throughout your listening room, not just in the sweet spot.

## PEAK PERFORMANCE ▼

At the heart of the M66's digital section is ESS Technology's flagship Sabre ES9038PRO DAC, an audiophile-grade design known for its exceptionally wide dynamic range, ultra-low noise and distortion, and outstanding time-domain performance.

The M66 is the first component to feature NAD's innovative Dynamic Digital Headroom (DDH) circuitry, which is activated with a control in the BluOS app. DDH eliminates digital intersample peak clipping distortion, which can occur during digital-to-analogue conversion with sudden high-frequency transients. The benefits are especially noticeable with percussion instruments—rim shots are faster and less strident; cymbals are more realistic and less splashy.

The M66 employs a multi-stage resistor-ladder volume-control circuit. This minimises thermal and related distortions that are characteristic of traditional analogue volume controls, maximises dynamic range, and accurately matches left and right-channel output across the entire volume range.

So that DSP-enabled functions like Dirac Live are available with all sources, analogue signals are converted to digital by ESS Technology's flagship ES9822PRO ADC chip. However, users can select the Analogue Direct mode, which bypasses all digital processing. Moreover, the M66 has separate signal paths for analogue and digital sources. Internally, the analogue and digital sections are physically separated and shielded from each other with their own separate power supply sections. Listeners can even use the BluOS app to disable the M66's Wi-Fi and Bluetooth circuits to prevent RF interference.

## CONNECT EVERYTHING ▼

The M66 has a wide array of inputs for all your digital and analogue sources. These include a HDMI port with eARC support, two coaxial and two optical S/PDIF inputs, an AES/EBU balanced digital input, two pairs of RCA line-level analogue inputs, and one pair of XLR balanced inputs. Vinyl fans will appreciate the M66's ultra-quiet separate MM and MC phono stage, which features precise RIAA equalization, high overload margins, and an innovative circuit that suppresses the infrasonic noise that is always present with vinyl playback without affecting bass response.

In addition to unbalanced RCA and balanced XLR outputs for connection to a power amplifier, the M66 has four independent unbalanced RCA and four balanced XLR subwoofer outputs. The M66's dedicated headphone amplifier has very low output impedance and very high maximum output voltage, enabling it to drive demanding high-impedance studio monitor headphones. The M66 also has Bluetooth connectivity, with support for the AAC and aptX HD codecs.

## A TIMELESS MASTERPIECE ▼

Everything about the NAD Masters M66 BluOS streaming DAC-preamp is intended to inspire pride of ownership: the gorgeous 7" touchscreen, the elegant aluminium casework, and the silky-smooth volume control.

The Masters M66 represents the pinnacle of what is technically achievable in a two-channel preamplifier today. And the M66 will maintain its technological leadership for decades to come. On the rear panel are two expansion slots that support MDC2, the latest iteration of NAD's Modular Design Construction future-proofing technology. In the future, M66 owners will be able to add new capabilities simply by inserting an MDC2 module into one of the expansion slots.

With its leading-edge technology, incredible versatility, and exceptional build quality, the Masters M66 is truly a masterpiece of sound.



## Specifications M66

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 IN, SINGLE-ENDED /ANALOG AUDIO OUTPUT

THD (20Hz - 20kHz)	<0.001% at 2V out
Signal-to-Noise Ratio	>105dB (IHF; A-weighted, ref. 500mV out, unity gain)
Channel separation	>116dB (1 kHz)
	>106 dB (10 kHz)
Input Impedance (R and C)	56 kohms + 100 pF
Maximum input signal	>5.6Vrms (ref. 0.1% THD)
	>8 Vrms (Analog Bypass)
Output impedance	Source Impedance + 22 Ohm
Input sensitivity	185mV (ref. 500mV out, Volume maximum)
Frequency response	±0.2dB (20Hz - 20kHz)
	±0.2dB (Analog Bypass, 20Hz - 20kHz)
Maximum voltage output -IHF load	>5V (ref. 0.1% THD)
	>10 V (Analog Bypass, ref. 0.1% THD)

#### BALANCED IN, BALANCED /ANALOG AUDIO OUTPUT

THD (20Hz - 20kHz)	<0.001% at 2V out
Signal-to-Noise Ratio	>105dB (200 Ohm source; A-weighted, ref. 500mV out)
Channel Separation	>116dB (1 kHz)
	>106 dB (10 kHz)
Input impedance (R and C)	56 kOhms + 100 pF
Maximum input signal	>5.6 Vrms (ref. 1% THD)
	>8 Vrms (Analog Bypass, ref. 1% THD)
Output impedance	Source Impedance + 22 Ohms
Input sensitivity	90mV (ref. 500 mV out, Volume maximum)
Frequency response	±0.2 dB (20 Hz - 20 kHz)
	±0.2 dB (Analog Bypass, 20 Hz - 80 kHz)
Maximum voltage output (IHF load)	>10 V (ref. 0.1 % THD)
	>20 V (Analog Bypass, ref. 0.1 % THD)

#### DIGITAL SOURCE IN, SINGLE-ENDED /ANALOG AUDIO OUTPUT

THD (20Hz - 20kHz)	<0.0005% at 2V out
Signal-to-Noise Ratio	>108 dB (IHF; A-weighted, ref. 500 mV out, unity gain)
Channel separation	>126dB at (1kHz)
	>115dB (10 kHz)
Input sensitivity	-20.25 dBFS (ref. 500 mV out (-6 dBV), max Volume)
Frequency response	±0.2 dB (20 Hz - 20 kHz)
Maximum voltage output -IHF load	>5 V (ref. 0.1 % THD)

#### DIGITAL SOURCE IN, BALANCED /ANALOG AUDIO OUTPUT

THD (20 Hz – 20 kHz)	<0.0005% at 2V out
Signal-to-Noise Ratio	>108 dB (IHF; A-weighted, ref. 500 mV out, unity gain)
Channel Separation	>126 dB (1 kHz)
	>115 dB (10 kHz)
Input sensitivity	-26.25 dBFS (ref. 500 mV out(-6 dBV), max Volume)
Frequency response	±0.2 dB (20 Hz - 20 kHz)
Maximum voltage output (IHF load)	>10 V (ref. 0.1 % THD)

#### LINE IN, SINGLE-ENDED/SUBWOOFER OUTPUT/2SUBWOOFERS

THD (20 Hz – 20 kHz)	<0.005% at 2V out
Signal-to-Noise Ratio	>84 dB (IHF; A-weighted, ref. 500 mV out, unity gain)
Output impedance	480 Ohms
Maximum voltage output -IHF load	>5 V (ref. 0.1% THD)

#### BALANCED IN, BALANCED /SUBWOOFER OUTPUT/2SUBWOOFERS

THD (20 Hz – 20 kHz)	<0.005% at 2V out
Signal-to-Noise Ratio	>80B (IHF; A-weighted, ref. 500 mV out, unity gain)
Output impedance	480 Ohms
Maximum voltage output -IHF load	>10 V (ref. 0.1 % THD)

**PHONO INPUT, SINGLE-ENDED /ANALOG AUDIO OUTPUT (Analog bypass)**

THD (20 Hz – 20 kHz)	MM: <0.008% (ref. 2 V out) MC: <0.02% (ref. 2 V out)
Signal-to-Noise Ratio	MM: >82dB (A-weighted, ref. 500 mV out) MC: >75dB (A-weighted, ref. 500 mV out)
Input Impedance (R and C)	MM: 56 kohms + 100 pF MC: 100 ohms + 280 pF
Input sensitivity	MM: 1.7 mV (ref. 500 mV out, Volume maximum) MC: 123 µV (ref. 500 mV out, Volume maximum)
Frequency response	±0.2 dB (20 Hz - 20 kHz)
Maximum input signal at 1kHz	MM: >80 mVrms MC: >7 mVrms (ref. 0.1 % THD)

**LINE INPUT, HEADPHONE OUT(Analog Bypass)**

THD (20 Hz – 20 kHz)	<0.002% (ref. 1V out)
Signal-to-Noise Ratio	>98 dB (32 ohms loads; A-WTD, ref. 0.5V out, unity gain)
Frequency response	±0.3 dB (20 Hz - 20 kHz)
Channel separation	>62 dB at 1kHz
Output impedance	Source Z + 4.7ohms
Maximum input signal at 1kHz	MM: >80 mVrms
Power consumption	
at Auto Standby ON and Network Standby OFF	0.5 W*
at Auto Standby ON and Network Standby ON	2.0 W**
OFF mode (Power switched OFF)	0.1 W

**BLUOS****AUDIO**

Supported Audio File Formats:	MP3, AAC, WMA, WMA-L, OGG, ALAC, OPUS
Supported Hi-Res Audio File Formats:	FLAC, MQA, WAV, AIFF, MPEG-4 SLS
Sampling Rates	up to 192kHz
Bit depths	16-24

**CONNECTION**

Ethernet/LAN:	Ethernet RJ45, Gigabit 1000 Mbps Wi-Fi Built In:Wi-Fi 5 (802.11ac), dual-band
Bluetooth Quality:	Bluetooth 5.0 aptX HD
USB	Type A

**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**
Supported Hi-Res Audio File Formats:	Free BluOS Controller App available for download from the respective App stores of Apple iOS devices (iPad, iPhone and iPod), Android devices, Kindle Fire and Windows or macOS desktops
Front panel	7-inch full colour touch screen
Remote Control	SRM1 remote control

**USER INTERFACE**

Streaming cloud services*	Tidal, Qobuz, Deezer, Spotify, Amazon Music HD, SiriusXM, LiveOne, HighResAudio, JUKE, Napster, Pandora, Presto Music.
Free internet radio*	TuneIn Radio, iHeartRadio, Calm Radio, Radio Paradise

**GENERAL SPECIFICATIONS**

Supports bit rate/sample rate	up to 24 bit/192 kHz
Frequency band	2.402G- 2.480G
Maximum transmit power (dBm)	7 dBm ± 2 dBm

**DIMENSIONS AND WEIGHT**

Box size (H x W x D) ***	H.569 x W. 519 x D.258 mm
Gross weight	16.25 kg (35.8 bs)

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

\*\* - With established wired or wireless network connection, wireless Bluetooth connectivity and no user interface interaction and no active source input for 20 minutes

\*\*\* - Gross dimension includes feet, volume knob and extended rear panel terminals.

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 M66