## Masters M12 Digital Preamp DAC



Built for the future, the M12 isn't a typical DAC and it isn't a typical preamplifier. The M12 is an ultra-high resolution digital audio hub that boasts a full roster of audiophile-grade features that leverage some of the most advanced digital audio thinking on earth. 24/192 Asynchronous USB offers modern connectivity options from any source imaginable. And NAD's DirectDigital ${ }^{\text {TM }}$ processing and a Class-A buffer guarantee real-time, 24-bit accuracy from the very first to the very last bit. The M12 interfaces with all digital or analogue musical sources, and renders them perfectly to power amplifiers and active loudspeakers.


## > NAD DirectDigital ${ }^{\text {TM }}$ Innovation

DirectDigital ${ }^{\text {TM }}$ amplification offers the highest level of performance. The 35 -bit data path with 24 -bit coefficients and 62 -bit accumulation, and dithered truncation back to 35 -bits after DSP functions guarantee the overall 24-bit accuracy. With this degree of resolution, all preamp functions can be accomplished with a new level of precision, and all in the digital domain. This eliminates the noise and distortion prone to analogue circuits. Because of the super high resolution, even 24-bit files are processed without truncation or loss of information.

## > Uncompromised Connection

Standard inputs include AES/EBU, Asynchronous 24/192 USB, coaxial and optical digital inputs and balanced and single-ended line level inputs including a high performance MC/MM phono stage. Rounding out the picture, a pure Class-A buffer using the latest generation of Super OP Amps provide low impedance balanced and single-ended connections to power amplifiers or active loudspeakers. A remote controls all functions and IR repeaters, 12 V triggers, and a serial port to make integration with advanced control systems a snap.

## > Fine Tune Your System

Because of the massive computing power and high-resolution signal path, some interesting features have also been incorporated to further perfect the listening experience. Want to add a subwoofer to your system? The M12 includes a second order high pass and low pass crossover with selectable frequency. You can even select different frequency knees for each filter. This level of flexibility and precision is made possible by our highly perfected DirectDigital architecture.

## > Future Forward MDC

One of NAD's most innovative technological advancementsModular Design Construction (MDC)—does away with obsolescence by providing a simple upgrade path to add future features and functionality. M12 owners can add an optional DD HDM-1 HDMI Module with 3 inputs and 1 output (3D video passthrough) and/or a network audio module, DD BluOS, with music management software that is controlled with an iOS or Android device. The DD BluOS MDC Module allows streaming of a variety of music services, HD streaming from a NAS device, and Tuneln radio; plus it gives you full control of your music library. Integrated WiFi/Ethernet and aptX Bluetooth ${ }^{\text {TM }}$ connections are also offered with the DD BluOS Module.


Specifications

| DIGITAL INPUT (COAXIAL, OPTICAL, USB) | M12 |
| :---: | :---: |
| Rated Distortion (THD+N with AES 17 filter) | <0.0005\% (0dBFS) |
| IMD Distortion | 0.0001\% |
| Input Impedance | 75 ohms (coaxial) <br> 110 ohms (AES/EBU) |
| Sample Rate | 32 kHz to 192 kHz (USB and digital S/PDIF) |
| Frequency Response | $\pm 0.5 \mathrm{~dB}$ (ref. $20 \mathrm{~Hz}-22 \mathrm{kHz}$ @ sample rate) |
| Channel Separation | $>-115 \mathrm{~dB}$ (ref. 0dBFS Volume -1dB) |
| Signal / Noise Ratio | >-125dB (ref. OdBFS 2V out) |
| Output Level | 2 V (ref. input 0dBFS) |
| INPUTS/OUTPUTS |  |
| XLR - AES/EBU |  |
| S/PDIFCoaxial $\times 2$ <br> Optical $\times 2$ |  |
| USB Class 2 Audio: asynchronous 24/192 support |  |
| DD AP-1 Analogue Phono Module |  |
| IR In |  |
| Trigger In | $12 \mathrm{~V} \pm 20 \%$ |
| Trigger Out | $12 \mathrm{~V} \pm 20 \%$ |
| GENERAL |  |
| Idle Power | 26W |
| Standby Power | <0.5W |
| Unit Dimensions (WxHxD) - Gross* | $\begin{aligned} & 435 \times 133 \times 383 \mathrm{~mm} \\ & 171 / 8 \times 51 / 4 \times 151 / 8 \text { inches** } \end{aligned}$ |
| Net Weight | 8.1 kg (17.91b) |
| Shipping Weight | 14.5kg (32.01b) |

* 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 55 mm for wire/cable management.

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