

norma
AUDIO ELECTRONICS



NORMA HS DA1



The Norma HS-DA1 is the synthesis of Norma's experience and know-how in Analog Amplification and Digital Sources. Finally, High-Resolution files have found an analog circuitry adequate to their quality. The HS-DA1 is a High-Resolution device in all its parts and characteristics, not only for the number of Bits it is able to handle.

From the desire to offer a compact solution, without compromises in quality, is born the first model of a new series, an extremely versatile product, easily customizable for the user's needs.

The HS-DA1 is available in three different versions:
DAC – 5 digital inputs, high quality converters, RCA and XLR analog outputs
VAR – Adds high quality, remote controlled volume control, to directly drive a power amplifier
PRE – All the features in DAC and VAR, plus a set of two analog inputs and a pair of Class-A headphone outputs, making the HS-DA1 a top quality all rounder – still at a very affordable price.



Norma is based in Cremona, Italy.

The city and its surroundings are well known all over the world for being home to great composers as Monteverdi and Ponchielli, and to famous violin makers such as Stradivari, Amati, Guarneri and many others. As of today, more than 100 violin makers' shops are found in the ancient roads of the city. In this inspiring context, where music permeates everything, for more than 20 years Norma has been involved in the study and implementation of sophisticated audio amplifiers, where technical skills and musical sensitivity must be merged together, in the same way the best musical instruments are made.

The result of this endeavor is a unique sound, which represents a synthesis of parameters usually set one against each other: dynamics, speed, and absolute transparency are combined with extraordinary musicality and total lack of listening fatigue.

The struggle between solid state and valves is finally overcome, as is the concept of reproduction.

Norma brings the listener to an intimate relation with the original event.



Technical Features:

- 5 digital inputs, USB, 2 x SPDIF RCA and OPTICAL, AES-EBU.
- All parameters customizable for each digital input: oversampling value, clock source, digital filter, phase.
- Two separate local clock oscillators 22MHz / 24 MHz, High Stability, low Jitter and low phase noise.
- Two PCM 24 Bit Digital to Analogue converters.
- Digital filter (up to 8x oversampling) with user selectable filter roll-off (Sharp or Slow).
- Proprietary I-V conversion architecture.
- Analog output stage fully based on discrete components.
- Extreme low noise, high speed, wide band circuit topology (>2 MHz).
- RCA (Unbalanced) and XLR (Balanced) output connections.
- Separate power supply for Digital and Analog sections.
- High filtering capacity with numerous low impedance capacitors, 15 Power supply regulators.
- Toroidal power transformer especially designed for audio applications.

HS-DA1 Var

- All features of DAC Version, plus
- Variable output level, with Direct/Variable selection.
- Remote control of all functions.

HS-DA1 Pre

- All features of DAC Version, plus
- 2 Analog Input Preamplifier section.
- 2 High Quality Class-A headphone amplifiers.
- Very low output impedance, to best match all types and impedance values of headphones. (e.g. 10-600 Ohms).
- Very wide range of Gain Values customization, to best match all types and impedance values of headphones.
- User-selectable amplification gain independently for line and headphone outputs, also done by remote control.
- Active and Passive mode selectable on RCA pre outputs, also done by remote control.
- Variable output level
- Remote control of all functions.

"Upon request, the REVO HS DA1 is also available in black anodized finish"



Technical Specifications

- Connections Digital Inputs : USB, 2x SPDIF RCA, AES/EBU, TOSLINK OPTICAL
- Connections Analog Inputs: 2 line RCA (PRE only)
- Sampling Frequencies: Up to 192.0KHz
- UpSampler Frequencies: Up to 192.0KHz or AUTO
- Connections Outputs: Line RCA output, XLR Balanced, additional Line RCA output (PRE only)
- Connections Headphones: 2x 6.3mm Jacks (0.5 Ohm Output Impedance)
- Outputs DAC Voltage: 3.0 V RMS (+10 dBV) RCA (at 0 dB), 6.0 V RMS (+16 dBV) XLR(at 0 dB)
- Output DAC and PRE Impedance: 200 ohm
- Output Tension: 10V RMS
- Gain: 0.5, 5, 6, 10, 17.5 dB (Selectable) (PRE only)
- Analogue DAC Output Filter: 0,0 to 180 kHz +/- 3 dB
- Analogue DAC Stage Frequency Response: 0,0 to 2MHz +/- 3 dB
- Configuration: Solid state
- Oversampling: DF 1706 8 x Digital Filter
- D/A Converter: PCM 1704 Multibit 24 Bit D/A converter
- I/V Conversion: I/V Conversion by proprietary topology with discrete component
- Analog Stage: Proprietary topology with discrete component, high linearity & low noise
- Supply: 230 V AC / 50 Hz, (100V AC or 115 VAC / 50-60Hz in some countries)
- Dimensions (HxWxD): 126 x 215 x 350 mm
- Weight: 5 Kg
- Note : Specifications subject to change without notice





Rear view – DAC and VAR Versions



Rear view – PRE Version



Top view – DAC Version



Top view – VAR Version



Top view – PRE Version



The utilization possibilities Norma's HS-DA1 offers are nearly endless: you can use it as a digital source to feed the signal to an external preamplifier or integrated amp, or you can drive a power amp directly (with VAR Version). When your loudspeaker system is off, or whenever you feel like it, you can enjoy your best music on your headphones, connecting them to the World-Class headphone outputs of the HS-DA1 PRE. Maybe you would like to connect a Phono stage or any other kind of external analog source to it. Or, to its high quality digital

inputs, you can connect devices compliant with all the major standards for digital signal transmission: AES/EBU, S/PDIF, Toslink, and USB.

The three-level construction of the HS-DA1, aside from keeping the signal paths short and providing an extremely large amount of functions within a relatively little product, allows the user to upgrade it at any time.

norma
MODULAR DAC HS DA1

192.0

OK

CLEAR

SRC

DIGITAL

ANALOG

HEAD

⏻

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