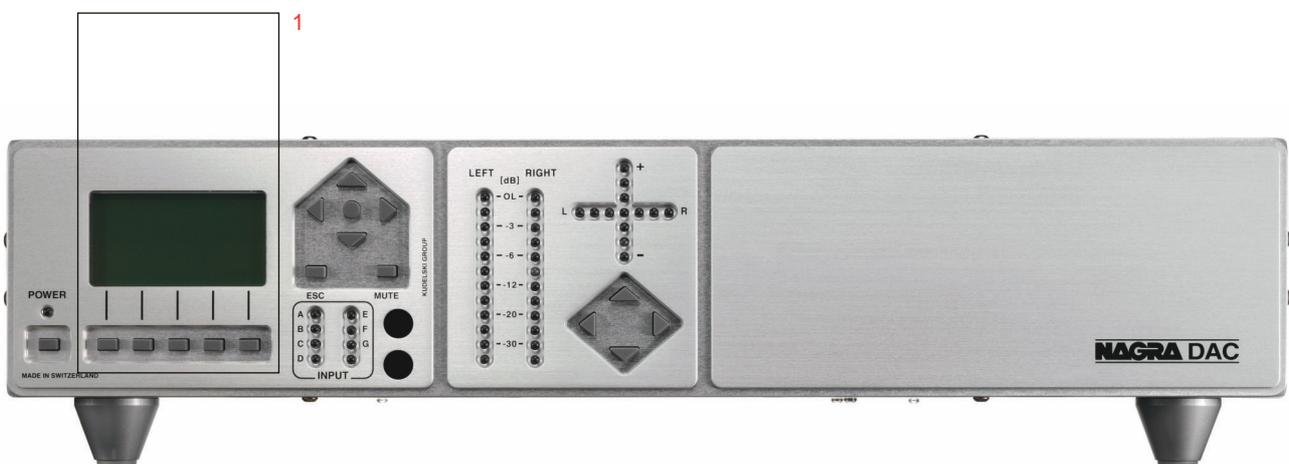


**NAGRADAC**  
Digital Audio Converter



# NAGRADAC



## A new revolution in the high-end Hi-Fi world

After revolutionizing the high-end world with ground breaking preamplifiers and power amplifiers, Nagra strikes again by introducing a new, indispensable piece of digital audio equipment, the Nagra Digital Audio Converter: DAC.

The DAC has inherited the fabulous electronic design of the Nagra D and Nagra V digital recorders used by the most prestigious music companies and recording engineers in the world. These exceptional machines have convinced the engineers that digital audio could convey the emotion and warmth of analog tape recorders and long play disks that they miss with other digital formats.

The DAC was designed with the same ingredients and philosophy to provide you with state-of-the-art technology serving and respecting your music.

## Ultimate musicality

The Nagra Digital Audio Converter is the result of 50 years of experience in high-end audio technology. As other Nagra products, it ignores compromise on quality.

Nagra has already demonstrated that whatever the technology – tube or solid state – its products (\*) offered ultimate musicality and transparency. With the DAC, this philosophy now extends to the digital Hi-Fi world.

## Far more than a converter

The technical and innovative features of the DAC will significantly enhance the performance of your system:

- Extensive digital and analog input/output formats
- Volume and balance control
- 192 kHz/24 bit capable with 192 kHz 24 bit up sampling to any input signal
- Jitter free ATF module
- Phase reverse
- Easy settings and operation with interactive keys
- Remote control Unit (Nagra RCU)
- Large display with automatic back-lit intensity adjustment
- Software upgrades with RS232 port

## (\*) Nagra high-end Hi-Fi products:

- PL-P Line and phono preamplifier
- PL-L Line preamplifier
- VPA Vacuum power amplifier
- MPA MosFet power amplifier
- SNST-R Miniature stereo analog recorder

### 1 Ergonomics

A large LCD display allows access to settings and advanced menu Function, interactive keys

### 2 Inputs

(2a) Analog: stereo balanced and unbalanced

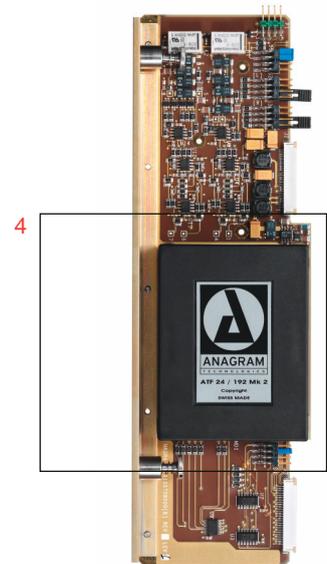
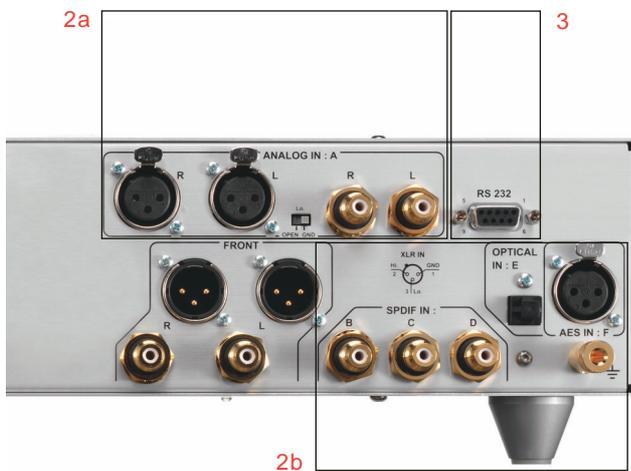
(2b) Digital: 3 S/Pdif, 1 AES/EBU, 1 TOSlink

### 3 Updates

The RS-232 communication port allows you to update your DAC, future-proof

### 4 ATF

Adaptive Time Filtering module on the D/A board



### High-end Audio

The DAC provides a 192 kHz 24 bit up sampling to all incoming signals. Even 16 bit resolution formats such as CD enjoy a smooth and elegant signal conversion.

The DAC features an ATF (Adaptive Time Filtering) module that increases the quality of all signals just before conversion stage.

Two twelve LED bargraphs indicate the level of the signal while balance and volume information is shown on a LED cross formation.

The different input names can be personalized. All internal settings can be memorized in three user's memories that are directly accessible using the interactive keys of the front panel.

Electronic boards are made of four layers. As no computer-assisted track routing software met our demanding specifications, the tracks have been routed manually in order to keep the integrity of the signal. As a result, the signal to noise ratio and channel crosstalk are maintained at the lowest possible level.

The DAC converter benefits from the Adaptive Time Filtering technology designed by Anagram Technologies SA

in Switzerland. ATF allows the input and output clocks to be completely independent, thus eliminating jitter. It also increases the signal to noise ratio of 16 bit signals. The ATF module runs on a Sharc 32 bit floating point DSP.

Last but not least, the Nagra DAC uses state-of-the-art Analog Devices 192 kHz D/A converter.

### RCU

The DAC features Nagra's Remote Control Unit. It allows access to all parameters, including navigation into the menus. In addition, the RCU can control the Nagra MPA and PL-L.

### Optional Output transformers

The DAC offers electronically balanced outputs on XLR as well as unbalanced outputs on RCA. Optional custom-designed Nagra transformers are also available for floating output.

# Technical Specifications

<b>Inputs</b>	1 AES/EBU	110 $\Omega$ +/- 1 % on XLR
	3 S/PDIF (IEC 958)	75 $\Omega$ +/- 1 % on RCA
	1 Optical (EIAJ)	EIAJ RC-5720 on Toslink
	1 Stereo Analog	Balanced or unbalanced
<b>Sampling frequency</b>	32 - 192 kHz	
<b>Quantization</b>	16 - 24 bits	
<b>Display</b>	128 x 64 back-lit LCD	Ambient light sensor to adjust brightness
<b>Volume adjustment</b>	By 0.5 dB step	Front panel and remote control
<b>Stereo balance</b>	By 0.5 dB step	Front panel and remote control
<b>Phase inversion</b>	On either channel	Via menu
<b>Level indication</b>	Dual 12 LED bargraph	
<b>Communication port</b>	RS 232	Software upgrades
<b>Analog inputs</b>	A/D Converter	Burr Brown PCM1804 24 bit
	Frequency response	20 Hz - 20 kHz +/- 0.5 dB
	Signal to noise ratio	> 105 dB (A weighted)
	Input impedance	100 K $\Omega$
<b>ATF</b>	32 bit floating point	Analog Devices Sharc DSP
<b>Outputs</b>	D/A converter	Analog Devices 1853
<b>Analog outputs</b>	Stereo	Electronically balanced (XLR) Unbalanced (RCA) Floating (with optional transformers)
	Frequency response	10 Hz – 22 kHz +/- 0.5 dB
	Signal to noise ratio	> 105 dB
	THD	< 0.02 %
	Crosstalk	> 105 dB @ 1 kHz
	Output impedance	50 $\Omega$
<b>Other</b>	Size	43x11x39 cm (16.9x4.3x15.3 inches)
	Weight	6.8 Kg (15 lbs)
	Power consumption	On 8.2 W Standby 2 W
	AC supply voltage	94-132 and 188-264 V / 44-66 Hz

All measurements made @ 48 KHz

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