



METRONOME TECHNOLOGIE

C2-A Signature Tube D/A Converter



Top of the range D/A converter from Metronome Technologie.

Metronome Technologie presents the most elaborated product this company has ever proposed.

The main objective was to develop the best sounding converter with the most analog like reproduction of music.

GLOBAL OVERVIEW

SEPARATED POWER SUPPLY

The separated power supply includes 6 transformers and 11 pre-regulators. 15 regulators are located near the critical stages in the converter box.

This separated power supply permit to remove most of the EMI/RFI pollution coming from the power supply. This permits also to isolate mechanically the sensitive electronics components of the D/A and analog stage from the vibrations induced by the transformers.

CONVERTER

The case incorporates the 3 mains stages of the converter:

- Digital input and synchronization,
- D/A converter components
- Analog output stage.

All three stages have been treated with the best possible solution. The best passive and active components have been selected.

DIGITAL INPUTS

All the 4 inputs accept from 34kHz to 96Khz signal sampling rate:

- 1 AES/EBU,
- 1 ATT fiber glass,
- 2 SPDIF (RCA, BNC with PLL loop adapted to 44.1 and 96khz signals)

Each of them is directly connected to is own DIR (digital input synchronization).

This configuration permits to lower the level of jitter at the input and to match at the best level possible to the cable used. These inputs stages are selected after the DIR components and these components are in use only when they are selected. In other words the DIR components are non powered when they are not in use: this permit to lower the level of EMI noise inside of the converter.

After input selection the digital signal goes to an up-sampler stage. This stage delivers a 96khz signal to the D/A stage.

An extra digital input is present to permit the use of an external high precision clock for the digital stage.

D/A STAGE

Separated for each channel with different regulations for digital and analog stage of the components and for each channel.

This permits to increase the channel separation and to lower the inter-modulation distortion between channels.

The D/A stage is directly connected to the analog output stage through a gentle and very musical low pass filter.

ANALOG STAGE

Made around an original tube circuit using two tube halves in parallel.

This permits to lower the output impedance of the circuit and his sensitivity to the following cable and preamplifier analog stage.

Great capacitors specially developed for Metronome under Metronome specifications are used on this stage: the sonic signature of these capacitors is very low and all the musicality is delivered at the output.

The analog output proposes both **balanced and unbalanced connectors**.

The analog stage is directly connected to the unbalanced output. The balanced signal is delivered through a high quality pair of transformers.

HIGH QUALITY COMPONENTS

In the power supply: schottky diodes, high speed regulators, discrete regulator for the high voltage used in the analog stage.

All electrolytic capacitors are from Philips, National, and ELNA. These electrolytic capacitors are bypassed with polypropylene capacitors.

Special polypropylene capacitors on the analog stage.

High quality PCB with good sounding solders.

TECHNICAL SPECIFICATIONS

DAC Resolution:	24 bit/192 khz 1 converters per channel 120dB of signal to noise ratio at the converter.
Power supply:	EMI rejection by Schaffner filter. Six transformers and 26 regulations: one for each critical part of the converter, digital input stage, digital up-sampling and processing, converter, analog output. Detachable AC cord with IEC plug Umbilical 1 meter long harness between both unit.
Power consumption:	80VA
Analog Outputs:	Balanced (XLR) and Unbalanced (RCA)
Valve Output :	Cathode follower with 6922 triodes
Standard Digital Inputs:	One DIR per digital input 2 S/PDIF (RCA) one for 44.1 and one for 96 khz 1 ATT/ST glass fiber optic 1 AES/EBU-XLR
Front Panel :	One inch thick Silver or Black Aluminum
Dimensions (W x H x D)	450 x 70 x 375 cm for each unit
Weight	30 Kg / 65 lbs for the set