

## **Owner's Manual**

# **Stello DA220 MK2**

24Bit/192kHz Digital to Analog Converter  
(Selectable Upsampling Rate)

**APRIL MUSIC, Inc.**

# INTRODUCTION

Thank you for choosing the Stello DA220 MK2 Digital to Analog Converter from April Music.

The Stello DA220 MK2 is composed of high-performance parts & circuits to provide true high-end sound reproduction from the source. The DA220 MK2 has a variety of input and output terminals, allowing it to be used widely not only for hi-fi applications, but also for recording in professional studios. DA220 MK2 is also equipped with **USB input** port so that you can connect your PC or notebook.

Upsampling is available and selectable (BYPASS, 48 kHz, 96 kHz and 192 kHz) by the recording condition of the software & personal preference.

The beauty of DA220 MK2 is the enhancement of the sonic performance compared to its previous version. The bass is fuller and the high is more airy to make you feel more close to the right music.

**DA220 MK2** is simply one of the best D-A converters regardless of the budget for the reproduction of the music and the film.

## CAUTION

The Stello DA220 MK2 was carefully packed at the factory to prevent any damage during transportation. We recommend you to take time to carefully examine the unit. Should you find any signs of impact or damage, please contact your dealer or April Music prior to using the DA220 MK2.

The voltage for every unit is set to the countries it is used. If you want to change internal voltage for use in different countries, you should contact the dealer from whom you purchased the DA220 MK2 or the dealer nearest of you. Or check with [www.aprilmusic.com](http://www.aprilmusic.com) for the voltage selection service when you travel.

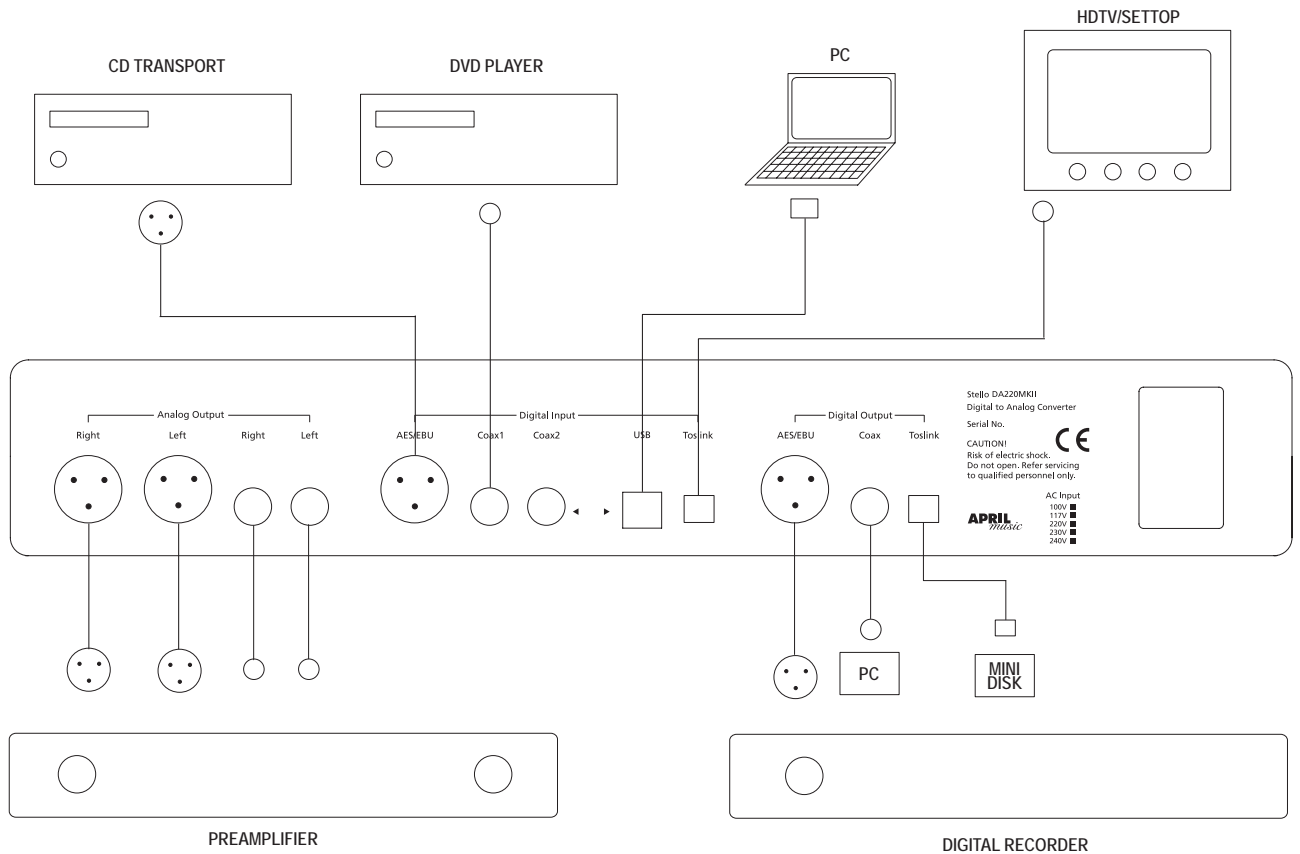
There are no serviceable parts inside of the DA220 MK2. Opening the cover without the approval of April Music may avoid the warranty program.

# FEATURES

- Supports upto 24Bit/192kHz upsampling
- Sampling Rate Selectable: Bypass, 48kHz, 96kHz, 192kHz
- True 24Bit Delta-Sigma DAC
- Digital De-emphasis
- Phase Selection: 0, 180 Degree
- On-chip PLL eliminates jitter
- Custom designed 6<sup>th</sup> order digital filtering circuitry
- Special buffer stage between digital filter and analog out
- Separate transformers for analog and digital circuits
- High quality electronic components and gold plated RCA connectors
- 4 Digital Inputs (1 AES/EBU, 1 Coaxial, 1 Coaxial or **USB** selectable, 1 Toslink)
- 3 Digital Outputs (1 AES/EBU, 1 Coaxial, 1 Toslink)
- 2 Analog Outputs: 1 Balanced Output (XLR) & 1 Unbalanced Output (RCA)
- Full Balanced Class A Operation Analog Stage

# CONNECTION

[Fig. 1] The Rear Panel



## Analog Output

- From the analog output terminal on the back, connect balanced output or unbalanced output terminal with the input terminals of the preamplifier or integrated amplifier.
- In case of balanced output, connection must be made through a balanced cable. Pin 2 is Hot.
- In case of unbalanced output, connection should be made by a pair of unbalanced cable.
- Balanced & unbalanced output can be connected to the amplifier simultaneously. After connecting both terminals, you can select the preferred channel. A slight difference in musical quality can exist because of the difference of the output level, but this difference is very normal.

## Digital Input

- For digital input, maximum 4 of inputs are available. Please refer to the table below.

SOURCE	CONNECTION TYPE RECOMMENDED	INPUT RATE	REPRODUCE UPSAMPLING RATE
CD Transport	Digital XLR, Coaxial or Toslink	Upto 96kHz	Upto 192kHz
DVD Transport	Digital XLR, Coaxial or Toslink	Upto 96kHz	Upto 192kHz
HDTV Receiver	Coaxial or Toslink	Upto 96kHz	Upto 192kHz
Satellite	Coaxial or Toslink	Upto 96kHz	Upto 192kHz
Personal Computer	USB, Coaxial or Toslink	Upto 96kHz	Upto 192kHz

- When listening to music using a CD transport, balanced digital cable is recommended for the maximum quality of sound reproduction.
- If there isn't any balanced digital terminal on the transport, connection should be made with coaxial terminal 1 or 2.
- For a connection with DVD player for a quality two channel sound reproduction, digital cable should be connected between the output of DVD player and DA220 MK2. DVD transport has coaxial and/or optical (Toslink) output terminal. You should change the setting of output into 'PCM' from the DVD setup menu. If you fail to set up properly, you can hear a hissing sound which indicates the output from DVD is not set to PCM mode.
- In case of HDTV or Satellite settop box, use a RCA type coaxial cable or optical Toslink cable between the settop and DA220 MK2.
- For the connection of PC or notebook, use included USB cable. Play any program for the playback of music or DVD. If you can not hear the sound, you should check the setup of your audio device by visiting CONTROL PANEL → SOUND AND AUDIO DEVICES → AUDIO → BASIC DEVICE and select "USB DAC" as your default sound device. Most of the PCs set this value automatically when DA220 MK2 is plugged in.

## Digital Output

- Digital output terminal is used for the transmission of digital signals for the digital recorders.
- DA220 MK2 has 3 digital outputs including AES/EBU Balanced digital output, coaxial digital output and Toslink optical output.

# OPERATION

[Fig. 2] The Front Panel



## STANDBY

The 'STANDBY' switch on the front panel operates an on/off function in normal time. When turning the power on for the first time, the main power switch located on the rear panel must be turned on.

With this power-on action, DA220 MK2 will go into an active mode immediately and the status light of 'STANDBY' shows green. To turn the unit off, simply press 'STANDBY' button again.

## RECORD

Choose any digital sources which you want to be directed to the digital output ports for recording.

Again, 'RECORD' button and light does not indicate digital output port selection but the selection of digital input source for recording.

## INPUT

This button is used for the selection of digital input by which you want to listen through DA220 MK2. Continuous pressing of button will enable you to select from AES/EBU, Coax1, Coax2 (or USB), Toslink and back to AES/EBU. A red light shows your selection status.

## UPSAMPLE

This button allows you to choose upsampling rate (up to 24Bit/192kHz) for the digital signal you have selected. You can choose from BYPASS, 48 kHz, 96 kHz and 192 kHz according to your preference.

### \* About the Effects of Upsampling

Theoretically and according to electronic data, upsampling of 192 kHz provides the most smooth & outstanding play-back quality. However, in actual playing, the sonic differences between the different upsampling rates are known to rely on a various factors. It is recommended to test with your favorite CDs to select the upsampling rate that fits your taste.

# SPECIFICATIONS

## DIGITAL INPUT

AES/EBU (XLR) Balanced Input      110 Ohm  
Coax1, 2 (2 RCA Unbalanced) Input   75 Ohm  
USB 1.1 input  
Toshiba Link Optical Input

## DIGITAL OUTPUT

AES/EBU (XLR) Balanced Output  
Coax (RCA Unbalanced) Output  
Toshiba Link Optical Output

## ANALOG OUTPUT

1 RCA Unbalanced Stereo  
1 XLR Balanced Stereo

ANALOG OUTPUT VOLTAGE              1.3 Vrms  
OUTPUT WORD LENGTH                  16, 18, 20, 24 Bits  
DYNAMIC RANGE                         110 dB Typ.  
SIGNAL-TO-NOISE RATIO                120 dB Typ.

DISTORTION                                0.003 %, 1 kHz  
   0.002 %, 10 kHz  
   0.002 %, 20 kHz

FREQUENCY RESPONSE                  10 Hz - 55 kHz (+- 3dB)  
SAMPLING FREQUENCY                  44.1 kHz to 192 kHz, Selectable. 192 kHz Default  
POWER REQUIREMENTS                  100/117/220/230/240 VAC, 50 or 60 Hz  
DIMENSIONS (WHD) & WEIGHT         435 x 85 x 350 mm, 7.5 Kg

# INTERNATIONAL LIMITED WARRANTY

The warranty service is valid only when purchased from an authorized dealer. A valid proof of purchase must be supplied for all warranty services. Any unauthorized work, modification or service rendered on the equipment will void the warranty.

Warranty Period	2 years
Date of Purchase	
Authorized Stello Dealer	
Telephone	
Serial No.	
Authorized Stello Service Center	

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