# Stello DA100

High-End Digital-to-Analog Converter
(USB input supported)



**April Music, Inc.** 

Thank you for purchasing DA100 digital-to-analog converter.

DA100 is not just an ordinary low-priced DAC in the market but a simply true high-end audio quality 24 Bit/192 kHz upsampling DAC. Only the best quality components are used and the world-class design features which is well known by our legendary DA220 DAC are adopted in a more compact platform.

DA100 also comes with USB (Universal Serial Bus) standard port for the wider PC applications.

Try DA100 with any of your digital sources and you will be surprised how the digital sound can change into so musically involving notes.

DA100 is made especially for you who understand what music means in our daily lives!

Sit back, relax and enjoy the music!

**April Music, Inc** 

#### 1. Overview

### 1) Simply High-End D-A Converter

DA100 is simply a reference-quality high-end digital-to-analog converter which has adopted the state-of-the-art technologies and tuned for the pure reproduction of the music. It is not just a DAC but a true high-end solution for the serious audiophiles.

DA100 is equipped with high performance circuitries like special digital input receiver, true 192 kHz/24 Bit upsampling, jitter free circuit, AKM4395 DAC Chipset which are used only for the top high-end application, 6<sup>th</sup>-order digital filter, and the full discrete class A analog output stage.

These functions are only available for those of DAC with the priced at 4 or 5 times more. DA100 is simply a musically-correct high-end DAC as well as its super performance guarantees the longer time of enjoyment without any problems.

### 2) 4 Digital Inputs including new USB 1.1

DA100 has 4 digital inputs. 1 Coaxial, 2 Optical (Toslink) and it also comes with one USB (Universal Serial Bus) for PC or Notebook connection.

Just plug your computer to DA100 with included USB cable and you will be amazed by the dramatic upgrade of sound level from your PC. Even a 1/10 compressed 128k MP3 files can be heard as close as the original WAV files thanks to a special circuitries only designed for DA100.

Not only music files, but you can also enjoy DVD or any music or movie files in your computer with high-end quality sound.

You can also connect your Cable TV settop-box, HDTV settop-box or a Game machine to experience the real dynamics and wide stage as well as the detailed micro-dynamics which are only possible through the really high priced DAC in the market.

DA100 is a versatile reference-audio-quality DAC for the variety of applications.

### 3) Premium Quality Components

Most of the components used in DA100 are true high-end audio quality grade. All the chipsets are first grade including digital receiver, 24 Bit/ 192 kHz upsampling chip and DAC (120 dB of dynamic range!).

Premium quality capacitors like WIMA polyprophylene and 1% resistors are used throughout the whole circuits to guarantee the super quality of audio playback.

Gold plated RCA connectors are specially selected and the switches are all industrial standard to support the longer life of usage.

Look carefully into the inside of DA100 and you will find out easily why this unit is sounding so amazing. No gimmicks but genuine components and true design!

### 4) Powerful Power Supply

Power supply for DA100 is also specially designed. 25VA custom-made toroidal power transformer is used for the fluent supply of energy for the circuitries.

And the regulation circuit has a very low output impedance  $(20m\Omega@10\text{Khz})$  to support the high quality of output power supply for the circuits with its super low hum and riffle characters.

You can easily change supply voltage by selecting the proper one with a slide switch. From 100~117V to 220~240V/50-60 Hz, you can use DA100 in any places in the world.

### 2. Front Panel



**POWER**: Turn the switch lever up to turn on the unit. Red LED will be on to indicate the DA100 is operating.

**UPSAMPLE**: You can select either 192kHz/24 Bit upsampling or Bypass.

'BYPASS' means the digital output is exactly same as the digital input (up to 96kHz/24 Bit).

You should be the judge to decide which mode is better because the musicality and nuance vary depending on the recording status of the sources.

Generally, we recommend 192 upsampling for most of the playback.

**LOCK**: Indicate that the input digital signal has been detected by DA100.

**INPUT**: Select one input you want to listen out of 4 digital inputs.

1 Coaxial, 2 Optical and 1 USB (Universal Serial Bus) inputs are supplied.

### 3. Rear Panel



**DIGITAL INPUT**: 4 input ports are ready (COAX, OPT1, OPT2, USB). Please make sure that you have to use proper cables for each input.

- COAX: Theoretically, all digital inputs are same in its music quality.
   But, in the real world of HiFi, COAX is better than the other connections (we believe what we hear).
   We recommend to use dedicated CD Transport to enjoy the super quality playback sound from your audio equipments.
- OPT1, OPT2: Standard Optical inputs (from Toshiba: Toslink)
   Industrially well-known as 'Toslink'.
   Most of the DVD Players, cable/HDTV settop-boxes,
   game machines, PC or notebook sound cards are equipped with either COAX or Toslink outputs for the external DAC.

In some devices, you should use "SETUP" menu to set the output mode of the device to export digital signal through this port.

DA100 accepts PCM signals only.

### Set -Digital Out- mode as -PCM-

- From DVD Setup Menu, go to Audio Setup → Digital Out → PCM.
- Many of DVD or universal players today support digital output with '96kHz'.

Set output to '96kHz' because DA100 accepts output up to 24 Bit / 96 kHz. Some CDs, DVDs, DADs outputs 96 kHz signal and you will be stunned with the reproduced sound!

- USB : Any USB (Universal Serial Bus) output can be connected with this port.

\*Refer to 4.3 for the PC connection.

• DA100 does not support ASIO driver.

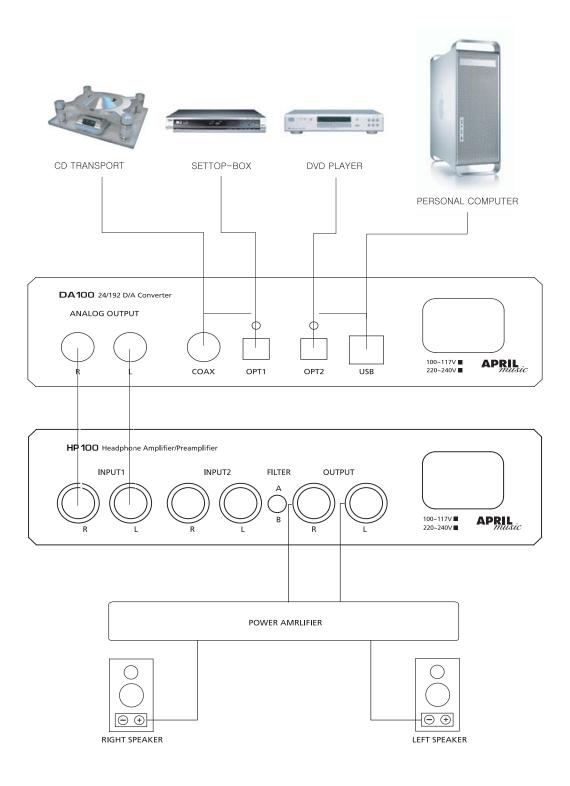
DA100 is designed for pure playback mode only.

**ANALOG OUTPUT**: Connect this output to your preamplifier or integrated amplifier.

Make sure of the right connection for the correct channel (LEFT & RIGHT).

## 4. Connection & Operation

### 4.1 How to connect



### 4.2 How to operate

- 1) Make sure that the level of your preamplifier or integrated amplifier set to low volume level.
- 2) Turn the 'Power' Switch up (Red LED will lit).
- 3) Select your input by rotating the INPUT knob (COAX, OPT1, OPT2, USB).
- 4) Check if the 'LOCK' signal is on. If the 'LOCK' LED is not on even though you set the knob for your selection, please check the wiring again for proper connection.
- 5) Set the 'UPSAMPLE' lever switch either up position for '192' upsampling, or down position for 'BYPASS' mode. You can change this setting during playing music.

### 4.3 USB output setting for your PC or Notebook

1) Connect your PC to DA100 with bundled USB cable.



- 2) Your PC will automatically detect DA100 by flashing the sign 'USB DEVICE CONNECTED' to indicate the connection.
- 3) Play audio or video files with your favorite player (Window media player etc.)
- 4) If your PC or Notebook fails to detect USB as your main audio output, you should set the default 'Sound & Audio Device' as 'USB'.

  Select 'Start' → 'Control Panel' → 'Sound & Audio Devices' → 'Audio', then Select 'USB Audio DAC'.

If you do not want to use DA100 as your default output device, you may change your setting again by selecting the supplied sound card output with the same procedure.

### **5. Features & Specifications**

#### **Features**

### Digital input interface

- Strong protection against external interferences
- Minimizes transmission errors
- 200 mV sensitivity on all SPDIF inputs

### **Upsample & D/A Converter**

- ARSC (Asynchronous Sampling Rate Conversion) functions

specially designed clock circuitry for extremely low jitter

Upsampling to 24 Bits /  $192 \mathrm{kHz}$ 

THD : 133 dB Dynamic range : 142 dB

- D/A converter upsampling caracteristics

Signal to Noise ratio : 120 dB Dynamic range : 120 dB

### **Preprocessing filter**

- Custom designed Sixth order filter circuitry for minimal noise and distortion

### **Analog output stage**

- Class A Push-Pull output stage with full discrete components.

#### Front display and control

- Main AC power switch and power indicator
- 192KHz/Bypass selection switch
- Digital input 'LOCK' LED indicator
- 4 digital input selection rotary switch

#### **Power supply**

- Custom-made toroidal transformer

### **SPECIFICATIONS**

**Digital inputs** 1 COAXIAL

2 TOSLINK

1 USB

**Digital filter** Proprietary 6th-order digital filter

**Analog output** 1 RCA Unbalanced stereo

1.2 Vrms output voltage

**Dynamic range** 110 dB typical

**Signal to Noise ratio** 120 dB typical

**Distortion** 0.003 %, 1kHz

**Frequency range** 20 ~ 45 kHz

**Sampling frequency** ASRC : Bypass, 192kHz

Digital input receiver: up to 96kHz

**Power requirement** 100~117 VAC/ 220~240 VAC selectable

50/60 Hz

**Dimension** 212(W)x55(H)x290(D) m/m

**Weight** 3.5 kg (4.5 kg, packaged)

#### WARRANTY

April Music, Inc. supports **2 years of free warranty** for DA100 under normal use from the date of delivery.

This warranty extends only to the original purchaser and does not apply to the parts that have been subjected to misuse, or abnormal operations. If the second hand user wants to inherit the warranty period, he (she) should contact April Music, Inc, by send an e-mail or a letter to activate the remaining warranty.

In the event of failure during the warranty period, April Music, Inc. will repair the DA100 at no charge as long as the unit is not working under normal use.

If the unit is damaged by the abnormal use (incorrect voltage connection, spilling coffee over the top etc.) and if you or your dealer can not fix the problems, the unit should be returned to the factory.

In this case, the estimate repair fee (including shipping & handling) will be submitted before the repair for shipping.

A return authorization is required when sending the units for repair. They must be shipped to April Music, Inc, prepaid and with its original cartoon (preferred).

There are no user serviceable parts inside except the voltage changing. And DA100 is running very hot inside because all analog outputs are full class-A operated discrete circuit. Care should be taken.

If you or any unauthorized persons have tried to change or modify the circuits without any prior consent from April Music, Inc, all the warranty will be void even the units are under warranty period.

#### \* Do not try to modify the products by any unauthorized persons!

### **Contact Information**

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