



# **DAC 0.1x**

**D/A CONVERTER**

**OWNER'S INFORMATION**

## **! IMPORTANT SAFETY INFORMATION !**

**HUMIDITY: DO NOT STORE OR OPERATE THIS UNIT IN AREAS OF HIGH HUMIDITY, OR IN CLOSE PROXIMITY TO WATER/DAMPINESS. DO NOT EXPOSE THE UNIT TO LIQUID.**

**EARTHING: THIS PRODUCT MUST BE EARTHED – ENSURE THAT THE MAINS SUPPLY CABLE IS EARTHED.**

**SHOCK: INTERNAL OPERATING VOLTAGES ARE LETHAL! DO NOT REMOVE THE TOP COVER. DO NOT ATTEMPT TO REPLACE THE FUSE WITHOUT DISCONNECTING THE UNIT FROM THE MAINS SUPPLY.**

**SAFETY COMPONENTS: INTERNAL FUSES AND OTHER SAFETY COMPONENTS ARE LOCATED INSIDE THIS UNIT IN ACCORDANCE WITH BS 60065 REQUIREMENTS.**

**IN THE EVENT OF SAFETY COMPONENT FAILURE, THEY MUST BE REPLACED WITH THE SAME PART TYPES ONLY. SUCH REPLACEMENT MUST BE CARRIED OUT BY A QUALIFIED SERVICE TECHNICIAN.**

### **PRECAUTION**

- Never touch the power cord with wet hands.
- Always pull the power cord out by the plug, not by the cord.
- Never expose the system to rain, moisture, excessive heat and magnetism.
- Never let an inexperienced person repair or reassemble the unit.
- Never put anything, especially metal, into the unit.
- Never place excessive weight on the unit.

### **POWER REQUIREMENTS**

Power requirements for electrical equipment differ from area to area. Please ensure that your unit meets the power requirements in your area. The power requirement for your unit is marked on the serial number plate on the rear panel.

If you are in doubt, please contact your dealer before plugging the unit into the mains supply!

## **CE DECLARATION OF CONFORMITY**

We declare under our sole responsibility that this product is in conformity with the following standards or standardized documents:  
BS EN 60065 in accordance with the regulations 73/23/EEC, 89/336/EEC (from 1<sup>st</sup> January 1997).

CE 94

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## TECHNOLOGY

Extensive research into the fundamental properties of the data stream itself have shown beyond doubt that regardless of the theoretical and measurable advantages of the signal manipulation employed in all currently available digital products, such as higher over sampling, noise shaping, re-clocking or jitter reduction, the result is this: all these corrective measures greatly interfere with the critical time domain requirements of the signal. Current theory is based on an assumption that music is similar to book keeping data which of course it is not. Music is a time continuum from beginning to end, which when broken is irreparably damaged and no amount of clever manipulation can ever restore it to its original time-frequency-amplitude duration or relationship, regardless of what the theorists may tell you.

The DAC uses the revolutionary and currently exclusive Audio Note digital technology dubbed 1x oversampling™ direct from disc™ circuit topology. The technology in essence dispenses with all the correction measures inherent in all other D/A converters and presents the digital signal directly to the converter after reformatting. In other words, all products in the Audio Note DAC range have no oversampling, no jitter reduction, no noise shaping and no re-clocking. Having removed all the digital filtering that is part of the oversampling, we have also dispensed with all filtering in the analogue domain to further retain good wide band phase-frequency and dynamically coherent behaviour. The end result being a reproduction more reminiscent of master tape in quality, with greater differentiation and contrast between different recordings.

DAC0.1x converter uses a Philips TDA1543 stereo D/A converter chip and features a 6111WA valve zero feedback output stage.

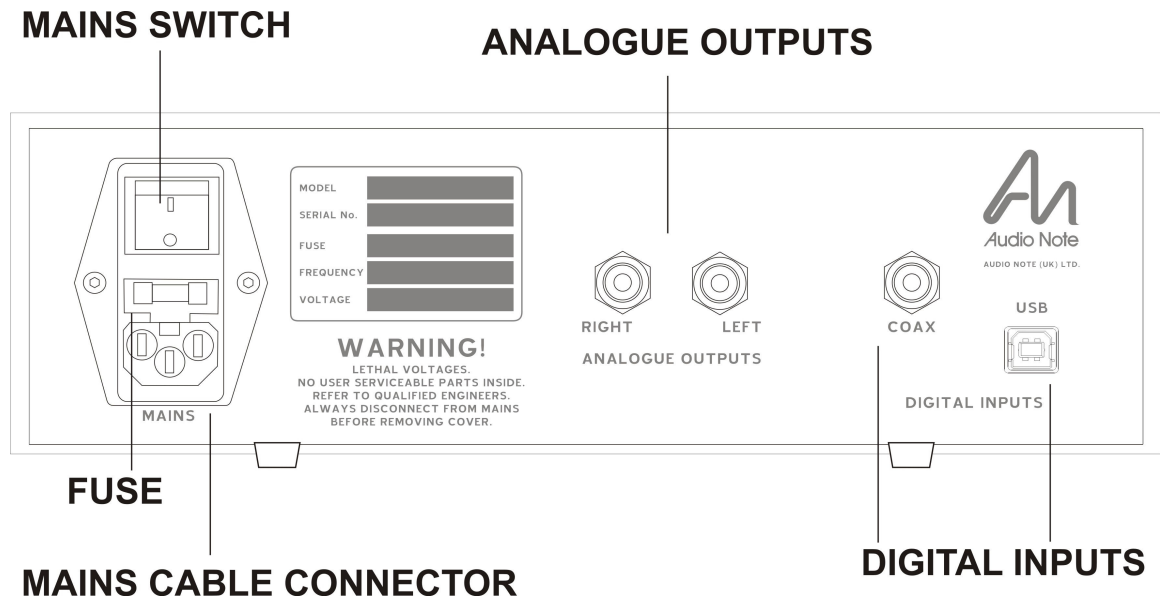
## UNPACKING & INSTALLATION

Please take care when unpacking the DAC0.1x. We recommend that you store the packing materials in case the unit requires shipping at a later date.

Next, select a suitable location for the unit, ensuring that adequate ventilation is provided (the valves generate a fair amount of heat). In the interest of safe, reliable operation, situate the DAC0.1x well away from dampness or direct sunshine.

Worthwhile sonic improvements may be obtained by locating the unit on a specifically designed audio component support system; we tend to prefer natural materials such as wood.

## CONNECTIONS:



Please ensure that the DAC0.1x and any source equipment is switched off before making any connections.

**NOTE:** It is important that all connections are firm, secure and airtight; any oxidation of the interconnects will result in loss of performance. Always use high quality interconnects; Audio Note interconnects are recommended, as they are manufactured to the same exacting standards as all of our products.

### Inputs:

The DAC0.1x provides two digital inputs: a 75Ω RCA unbalanced input and 'B-type' male USB 1.1 or USB 2.0 connector. Optical inputs are not provided as we have found optical transmission to sound far inferior to transmission via a standard coaxial cable.

Connect the unbalanced input to your CD transport or other digital source and/or USB input to your computer.

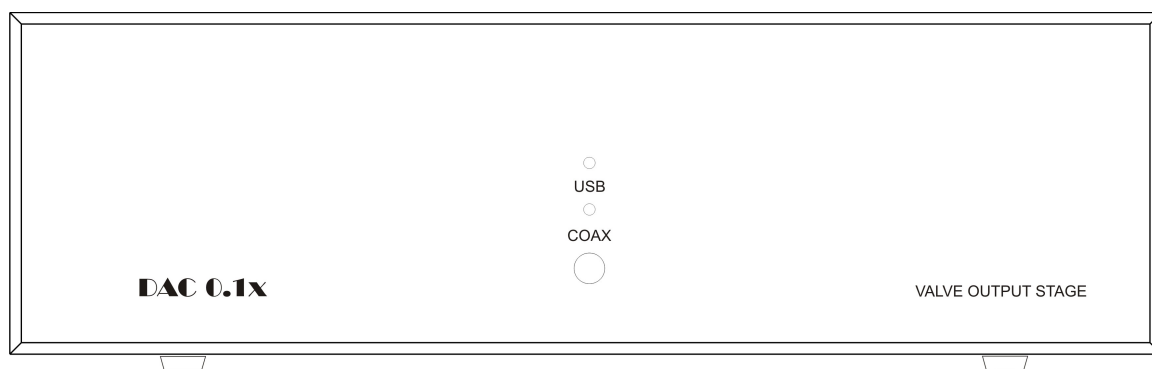
### Outputs:

The DAC0.1x has one unbalanced analogue output. This consists of a stereo pair of RCA connectors, colour-coded red for right channel and black for left channel. Connect the output to a suitable pre-amplifier.

### Mains power connector:

An IEC power connector is located on the back of the DAC0.1x. Use the supplied power cable to connect the DAC to the mains supply. Ensure the power is off at the switch when you do this.

## OPERATION



Press button on front panel for short time to select digital input, USB or COAX. Selected input will be indicated by red light.

### Using the DAC0.1x with dedicated CD transport:

Once all the connections are complete, turn on the digital source. Next turn on the DAC0.1x by using the rocker switch located on the back panel above mains inlet socket. The red led on the front panel confirms that the unit is on.

The DAC0.1x will improve over time and will start to sound increasingly well balanced. This is because of the "bedding in" time taken by new electrical components inside the unit. Also, the DAC's sound quality improves as the unit reaches its normal, stable operating temperature. Only a rear panel on/off switch is provided as the unit is designed for continuous operation. The DAC0.1x need not be switched off each time after use. It is interesting to note that continuous operation not only results in optimum sonic performance (since the unit is maintaining a constant operating temperature) but also causes less electrical stress and so extends component and valve life.

All our DACs have been designed to run into impedances of 100kOhms or greater. Many preamplifiers both active and passive have low input impedances. We do not recommend less than 50kOhms as this causes problems with bass roll off. If you are in any doubt consult your dealer. Audio Note offer a modification to customers who own pre-amplifiers with a low input impedance, which is fully refundable if at any time an Audio Note pre-amplifier is purchased as a replacement.

### Using the DAC0.1x with a PC/MAC computer:

***The computer MUST BE PROPERLY GROUNDED.***

The USB interface acts as a 'native' USB audio device and does not require the installation of any custom drivers. List of compatible operating systems is below:

- Microsoft™ Windows™ 98SE/Windows Me Japanese/English edition (For Windows 98SE and Windows Me, the HID function is not fully functional with the default class driver.)
- Microsoft Windows 2000 Professional Japanese/English edition
- Microsoft Windows XP Home/Professional Japanese/English edition (For Windows XP, use the latest version of the USB audio driver available from the Windows Internet site, or apply Service Pack 1 or later. See the Q310507 white paper available from Microsoft.)
- Microsoft Windows Vista™ Business Japanese/English edition
- Apple Computer Mac OS™ 9.1 or later Japanese/English edition
- Apple Computer Mac OS X 10.0 or later English edition
- Apple Computer Mac OS X 10.1 or later Japanese edition SP (For the Mac OS X 10.0 Japanese edition, plug and play does not work appropriately for USB audio devices.)

*Please note:*

This device is a high speed serial data processor, and by its nature, requires a very high volume of USB bandwidth. It will benefit greatly from being the only device connected on its USB 'bus'. Sharing the same bus with other devices may cause unwanted artefacts such as dropouts or temporary loss of signal. This especially includes the use of the DAC0.1x on a USB hub/splitter alongside other USB components

### **Computer setup for USB input**

A good quality USB A to B cable is required to connect the unit to the computer (not supplied).

Plug the B (square) end into the socket in the back of the DAC0.1x

Plug the A (rectangle) end into a free USB socket on the computer.

The computer should detect the new hardware and install a generic driver automatically (No setup or driver disk required).

CD, MP3, WAV files played on any software should now play through the DAC0.1x.

### **PC**

Check the computer has picked up the device and is currently using it by clicking:  
(most Windows versions)

- Start
- Settings
- Control panel
- Sounds and Audio Devices
- Audio

Check that "USB audio device" appears under PREFERRED AUDIO DEVICE tab.

A second mixer will now be available which will be the default mixer whenever the DAC0.1x is plugged in. Use this mixer to select the source or adjust levels if required.

### **Mac**

Check the computer has picked up the device and is currently using it by clicking:  
(MAC OS X)

- System preferences
- Hardware
- Sound

Check that "USB audio DAC" is selected under the OUTPUT tab.

If the computer's warning sounds/chimes are to played through the DAC0.1x, make sure it is selected under the SOUND EFFECTS tab too.

**Note:** USB may also be selected as an output in some individual programs.

## **SPECIFICATIONS**

<b>Power source:</b>	<b>AC 100-120V or 220-240V 50/60 Hz</b>
<b>Output impedance</b>	<b>Less than 2 kohm</b>
<b>Reference output</b>	<b>2.6V RMS (approx.)</b>
<b>Channel balance</b>	<b>Less than 0.25dB</b>
<b>Fuse:</b>	<b>220/240V - 800 mA Anti-surge 100/120V - 800 mA Anti-surge</b>
<b>Dimensions: (incl. connectors)</b>	<b>300 (W) x 96 (H) x 270 (D) mm</b>
<b>Weight:</b>	<b>3kg</b>
<b>Max power consumption:</b>	<b>48W</b>