



DIGITAL TO ANALOGUE CONVERTER

**OWNER'S INFORMATION** 



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# ! IMPORTANT SAFETY INFORMATION!



# RISK OF SHOCK OR ELECTROCUTION! INTERNAL OPERATING VOLTAGES ARE LETHAL!

Do not remove top cover, unless specifically instructed to do so in the user manual.

This unit contains fuses and other safety components in accordance with BS60065 requirements.

In the event of failure, replacement fuse or safety component must be of the same part type and value.

# SUCH REPLACEMENT MUST ONLY BE CARRIED OUT BY A QUALIFIED SERVICE TECHNICIAN.

Do not attempt to replace any fuses without first disconnecting the unit from the mains electricity supply.



This product must be earthed – ensure that the mains supply cable earth / ground is correctly connected.



This product generates high levels of heat. Adequate ventilation must be provided. Do not restrict airflow through any ventilation slots or place the unit on any surface that may restrict airflow.

Valve equipment operates at extremely high temperatures; KEEP OUT OF THE REACH OF CHILDREN AND ANIMALS.



Do not store or operate this unit in areas of high humidity or in close proximity to water / moisture.

Do nor expose or immerse the unit in liquid of any kind.

# **OTHER SAFETY PRECAUTIONS: -**

Never touch the power cord with wet hands.

Always remove the power cord by grasping the plug, not the cable.

Never expose the unit to excessive heat or magnetism.

Never let an inexperienced person repair or reassemble the unit.

Never put anything, especially metal objects, inside the unit.

Never place excessive weight on the unit.

# 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 January 1997)

**CE 94** 

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#### **DISPOSAL**

This product must not be disposed of as normal household waste. To prevent possible harm to the environment please separate the product from other waste to ensure that it can be recycled in an environmentally safe manner. Please contact your retailer or the appropriate local government office for collection facilities.

## **POWER REQUIREMENTS**

Power requirements for electrical equipment vary depending on your geographical location. 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, located on the rear panel.

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

# INTRODUCTION

Thank you for purchasing this Audio Note (UK) product. With the correct care it should give you many years of pleasure and enjoyment.

Please take the time to read all of the information in this manual before connecting your new component to an electrical supply or your system, to ensure both your safety and satisfaction.

Please note that due to our desire to continually improve products, specifications are subject to change without notice. Therefore it is important to refer to the manual that is supplied with your product for the most accurate information; manuals downloaded from our website or obtained from other sources may no longer fully apply to your product.

If you have any questions regarding the information contained within this document or your new component, please feel free to contact us: -

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"Music's Finest Conductor"

Congratulations on your purchase of the Audio Note™ DAC1.1x MkII Signature.

The DAC1.1x Mk II Signature was specifically designed and engineered for the best *sonic* performance rather than technical specifications. Although the DAC1.1x MkII Signature is a digital component (there is no avoiding this unfortunately!), it will bring a new level of musicality to your CDs and is fatigue-free during extended listening periods. In order to obtain the best possible performance and longevity from your DAC, please read over this manual carefully.

Technology: The DAC1.1x MkII Signature uses the revolutionary and currently exclusive Audio Note<sup>TM</sup> digital technology dubbed the 1xoversampling<sup>TM</sup> direct from disc<sup>TM</sup> circuit topology. The ultimate version of this technology is found in the extremely expensive DAC5 Signature, and we have taken great to ensure that as much of the inherent advantages of the topology have been retained in the sound of the DAC1.1x MkII Signature. The technology dispenses with all the correction measures inherent in all other d-a converters and presents the digital signal directly to the converter after reformatting. This allow you to hear what is actually recorded on each disc, rather than, as has been the case up to now, some technically and cosmetically altered version, as a result the reproduction is more reminiscent of a master tape in quality.

Not surprisingly for an Audio Note<sup>™</sup> product, the DAC uses vacuum tube technology, implemented using traditional Audio Note techniques, of simple signal paths incorporating no correction or feedback operating the valves at their most linear operating points for best sound and longevity. Also the Signature version uses Black Gates, Tantalum resistors, Audio Note AN-C copper wiring and Audio Note copper foil paper in oil signal caps.

## UNPACKING & INSTALLATION.

Please take care when unpacking the DAC. 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 vacuum tubes do generate some amount of heat). In the interest of safe, reliable operation, situate the DAC away from dampness or direct sunshine.

Worthwhile sonic improvements may be obtained by locating the unit on a suitably designed audio component support system.

#### **UPGRADING**

One of the biggest problems with Digital Audio is the short lifecycle of all a few products, which is why we have made the DAC1.1 Signature upgradeable to a DAC2.1x. This way your basic investment is not devalued but remains secure for many years to come.

# **CONNECTION - Digital**

A coaxial connection enables connection of the DAC to a CD transport or other digital sources.

## Before making a connection, ensure that the Transport & DAC are turned off.

Select a suitable coaxial cable for digital use, we recommend Audio Note<sup>TM</sup> AN-A, AN-C copper interconnects or AN-S or AN-V silver interconnects, in a 75cm\* run with Audio Note<sup>TM</sup> AN-GP RCA plugs. The DAC uses BNC and XLR type input sockets.

Plug one end of the coaxial cable into the RCA socket on the DAC (marked Digital Input) using the supplied BNC adaptor and connect the other end of the coaxial cable to your CD transport, (marked Digital Output). Set the adjacent switch to "unbalanced".

Alternatively, you can make a balanced connection using the XLR connection and setting the adjacent switch to "balanced".

Your dealer can advise on suitable type and quality of cable and give you a recommendation as to which Audio Note<sup>TM</sup> cable is the best choice. (The best recommendation is Audio Note<sup>TM</sup> silver cable).

\*Some special notes about digital cables - Try to use a digital cable of less than 1.5 metre in length. Ideal length is in our opinion, 0.75metre.

## **CONNECTIONS - Analogue**

Be sure your amplifier is turned off before connecting the DAC to it using an RCA-RCA interconnect.

## **CONECTION – Mains**

The DAC has an IEC mains inlet socket. Use the supplied mains cable to connect the unit to the local mains supply. The fuse is situated in the inlet socket as well.

## **OPERATING the DAC1.1x MK II Signature**

Once all the connections are complete, turn on the CD transport. Next turn on the DAC by using the rocker switch located on the back panel next to mains inlet socket. Now turn on the amplifier. The red led on front panel confirms unit is on.

If all is in order, the system is now ready to play music, and at last the sound of your compact discs will be tolerable!

The DAC1.1x MkII Signature will improve over time and start to sound really 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 DAC 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.

**Please Note:** All our DACs have been designed to run into impedances of 50K or above. Many transistor amplifiers and passive devices are not. We do not recommend less than 20K as one of the problems is bass roll off. If you are in any doubt consult your dealer.

#### **AFTER CARE**

No special maintenance is required for the DAC1.1x MkII Signature. Cleaning is best made with a soft cloth or brush similar to those sold by photographic stores for lens cleaning applications. Use a cloth dampened with mildly warm water and a weak soap solution for removing grease or oily substances. Strong or alcohol based solvents may cause damage to the DAC's finish.

Replacing the vacuum tubes. The valves used in the DAC1.1x are a common double triode type 69226DJ8/ECC88, which should provide a useful life span of about 5 years if the DAC is operated 24 hours per day, which is the recommended operation and the one that sounds the best. There are many equivalents to the ECC88/6DJ8 (see my comments below).

#### EXPERIMENTING WITH DIFFERENT VALVES.

As mentioned before the 6DJ8/ECC88 have a number of equivalents and were made by a large number of manufacturers, they are now only made in Russia and Yugoslavia. Equivalents include: 7308, E88CC, 6922, E188CC, CV2493 (E88CC), CV5358 (ECC88), CV4110 (very low noise E188CC0, CV4108, CV4109, CV4111 (all E188CC types). These were made by Sylvania, PhilipsECG, Mullard, Philips (Holland), Siemens, Telefunken and many others. The best I have found are the Telefunken E88CC 01 gold pin, expensive, but worth every penny.

# **TECHNICAL SPECIFICATIONS**

OUTPUT IMPEDANCE Less than 2 KOhm

REFERENCE OUTPUT 3.0V RMS (approximately)

CHANNEL BALANCE < 0.5 dB

TUBE COMPLIMENT 2 x 6DJ8WA

UNIT WEIGHT 5.1 KG

**SHIPPING WEIGHT** 

UNIT DIMENSIONS 145mm (h) x 300mm (w) x 415mm (d)

SHIPPING DIMENSIONS

MAINS INPUT AC 100-120V/220-240V 50/60 Hz

MAINS FUSE 800mA Anti-Surge (110/120V Supply) 500mA Anti-Surge (220/240V Supply)

MAXIMUM POWER CONSUMPTION 20 Watts

NOTE Due to Audio Note (UK)'s ongoing research

and development program, specifications are

subject to change without notice.

# WARRANTY INFORMATION

Audio Note (UK) warrants this product to be free from defects in materials and workmanship for two years from the original date of purchase from an appointed Audio Note (UK) dealer, and agrees to covers the cost of parts and associated labour required to correct such defects, subject to terms & conditions.

This Warranty is offered to the first purchaser only.

Any valves supplied with the unit are warranted for three months from the original date of purchase.

If the product fails in normal domestic use and during the Warranty period due to the above described faults or defects, Audio Note (UK) will, at its discretion, repair or replace the item free of charge within a reasonable time once it has been returned to Audio Note (UK) or an appointed Audio Note (UK) dealer or service engineer.

Audio Note (UK) is not liable for any shipping charges incurred whilst transporting the product to or from Audio Note (UK) or an appointed Audio Note (UK) dealer or service engineer, should the item require service or repair during or after the Warranty period.

If the product must be shipped, please use the original packaging materials and include a copy of the original sales receipt along with a note explaining, in as much detail as possible, the problems you are experiencing with the unit.

Only use a reputable Courier Service or Shipping Agent, and ensure that your product is insured during transit.

Any servicing, repairs or modifications not authorized by Audio Note (UK), or carried out by persons other than appointed Audio Note (UK) service engineers will invalidate any warranty.

This Warranty does NOT cover: -

Damage sustained whilst in the possession of a shipping agent, retailer or consumer and not caused as a direct result of defects in materials or workmanship.

Damage caused by normal wear and tear.

Damage or defects caused by abnormal or unreasonable use.

Damage caused by accident, acts of nature, misuse or neglect.

Damage caused by a failure to follow the operating and installation instructions supplied with the product.

Damage caused by improper or careless cleaning.

Audio Note (UK) reserves the right to refuse warranty for any component of which the serial number has been removed, defaced or tampered with.

# **CONTACT INFORMATION**

If in the future your Audio Note (UK) product requires servicing, or if you require technical support or have any questions regarding this or any of our other products, please contact your local Audio Note (UK) dealer.

Alternatively, please feel free to contact us directly: -

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